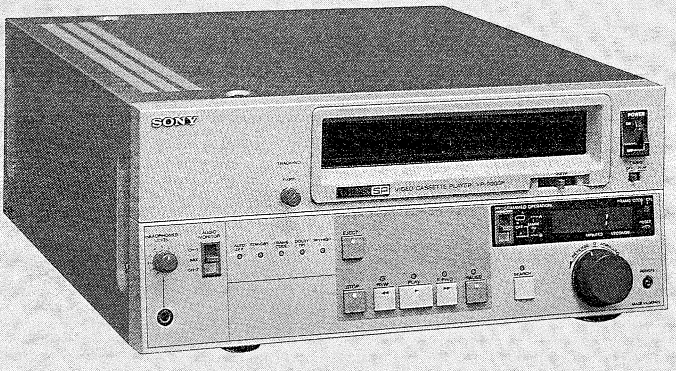
U-matic SP

VIDEO CASSETTE PLAYER

VP-9000P

VOL-2



SONY

SERVICE MANUAL

SPECIFICATIONS

System

Video signal system	CCIR standards, PAL color

Video

Outputs	VIDEO OUT 1, 2 (BNC type) ×1 each 1.0 Vp-p ±0.2 Vp-p, 75 ohms, unbalanced sync negative DUB OUT (7-pin) ×1 TV (8-pin) ×1
Horizontal resolution	SP mode: 300 lines (both B/W and color) High-band: 260 lines (both B/W and color) Low-band: 250 lines (both B/W and color)
S/N	Color: more than 46 dB Luminance (Y): more than 48 dB
Sync signal input	SYNC IN (BNC type) ×1 2.5 Vp-p (2 to 5 Vp-p), 75 ohms, unbalanced
RF OUT (OFF TAPE)	(BNC type) ×1 0.5 (0.3 to 1.0) ±0.1 Vp-p, 75 ohms, unbalanced

Audio

Outputs	AUDIO LINE OUT CH-1/L, CH-2/R (XLR 3-pin male) ×1 each + 4 dB (at 600 ohm load), balanced AUDIO MONITOR (phono jack) ×1 −5 dB (at 47 k ohm load) TV (8 pin) ×1 HEADPHONES (stereo phone jack) For 8-ohm headphones Level adjustable (from −26 to −46 dB)
S/N	With Dolby NR off 52 dB (KSP, KSP-S tapes) 50 dB (KCA, KCS tapes) (both channel 1 and 2 at 3% distortion)
Frequency response	50 to 15,000Hz (both audio channel 1 and 2 with Dolby NR off)

Other functions

Memory backup of programmed operation	3 years from shipment
Pause	A still picture is obtained with long pause function
Search	Still, $\frac{1}{30}$ to 5 times normal speed in both forward and reverse directions With RM-580 and RM-500: picture search with 8 times normal speed (both KSP and KSP-S tapes)
Tracking control	Possible
Skew control	Possible
Sync system	Automatic switching between internal and external
Dropout compensator	Built-in

Tape transport

Tape speed	95.3 mm/sec.
Playback time	Approx. 60 minutes (with KSP-60)
Fast forward and rewind time	Within 4 minutes (with KSP-60)
Wow and flutter	Less than ±0.23% p-p (DIN)
Tape compatibility	U-matic video cassette tapes
Usable tapes	KSP, KSP-S, KCA, KCS type

General

Power requirements	198 – 264V AC, 48 – 64Hz
Power consumption	70 W (with the RM-580 and RF kit)
Operating position	Horizontal
Storage temperature	−20°C to + 60°C (−4°F to + 140°F)
Operating temperature	5°C to 40°C (41°F to 104°F)
Dimensions	424 × 192 × 492 mm (w/h/d) ($16\frac{3}{4} \times 7\frac{5}{8} \times 19\frac{3}{8}$ inches) including projecting parts and controls
Weight	Approx. 18 kg (39 lb 11 oz)
Supplied accessories	Operating instructions (1) RF modulator compartment cover (1) AC power cord (1)

Optional accessories

BKU-701 computer interface board
FCG-700 frame code generator
RX-707 auto search control unit (for RS-232C interface)
RX-353CE, RX-303CE auto search control unit (for 33-pin interface)
RM-690 remote control unit (for REMOTE connector)
RM-580, RM-500 remote control unit (for 33-pin interface)
RFK-660UCE/660UB/660UF/660CH RF kit
RMM-507 rack mount kit
RM-555 multi remote control unit

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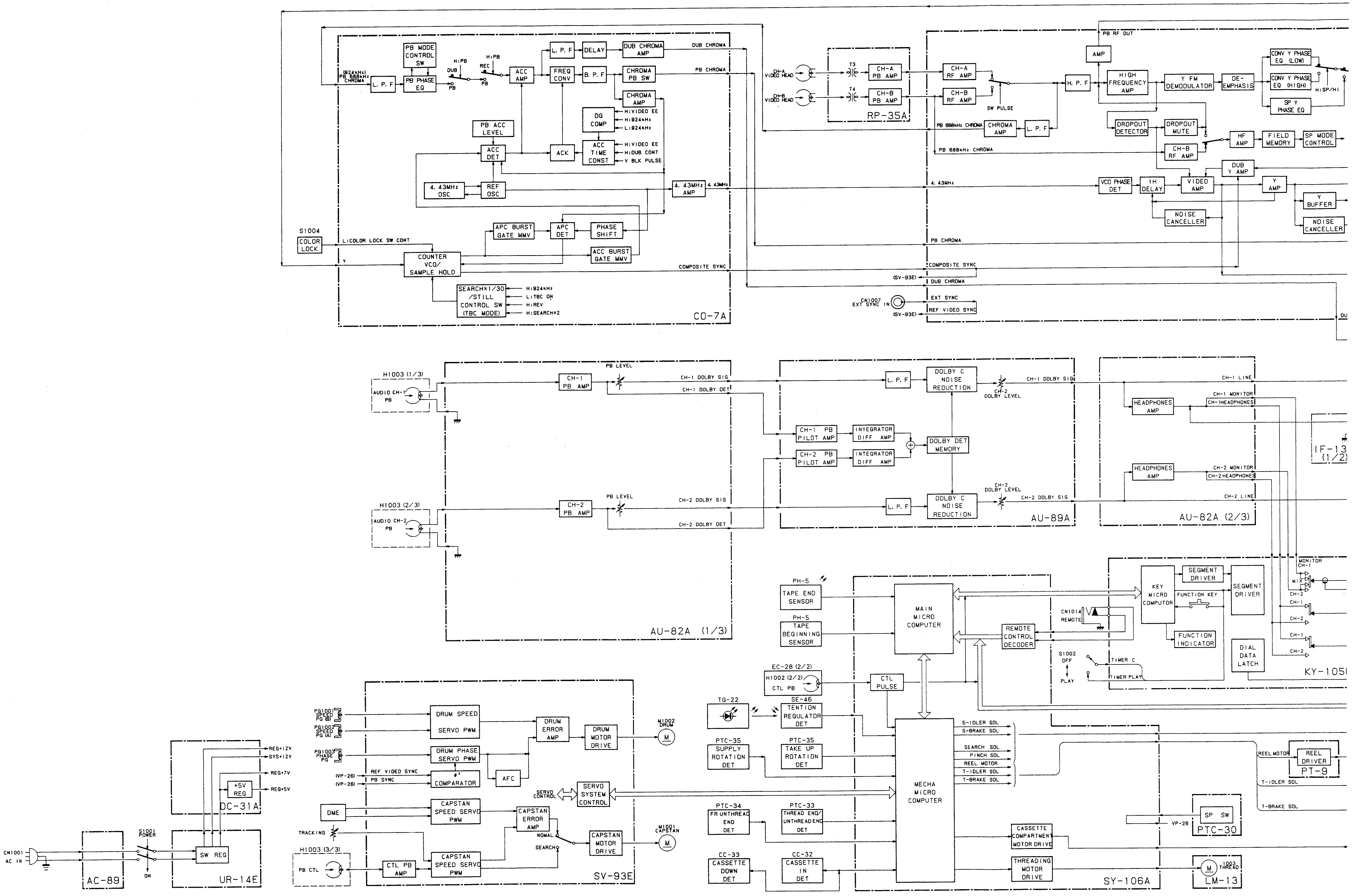
BLOCK DIAGRAM

OVERALL
BLOCK DIAGRAM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L. P. F
PB PHASE EQ
ACC AMP
L. P. F
DELAY
DUB CHROMA AMP
DUB CHROMA
FREQ CONV
B. P. F
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PB CHROMA
CHROMA AMP
DG COMP
PB ACC LEVEL
ACC DET
ACK
ACC TIME CONST
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REF OSC
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APC BURST GATE MMV
APC DET
PHASE SHIFT
ACC BURST GATE MMV
S1004
COLOR LOCK
L:COLOR LOCK SW CONT
COUNTER VCO/ SAMPLE HOLD
COMPOSITE SYNC
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Y BUFFER
NOISE CANCELLER
NOISE CANCELLER
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SEGMENT DRIVER
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PINCH SOL
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(VP-26) PB SYNC
SERVO CONTROL
SERVO SYSTEM CONTROL
DME
TRACKING
CAPSTAN SPEED SERVO PWM
CAPSTAN ERROR AMP
NOMAL
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CAPSTAN MOTOR DRIVE
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CTL PB AMP
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SYS+12V
REG+7V
REG+5V
+5V REG
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CN1001 AC IN
S1001 POWER
ON
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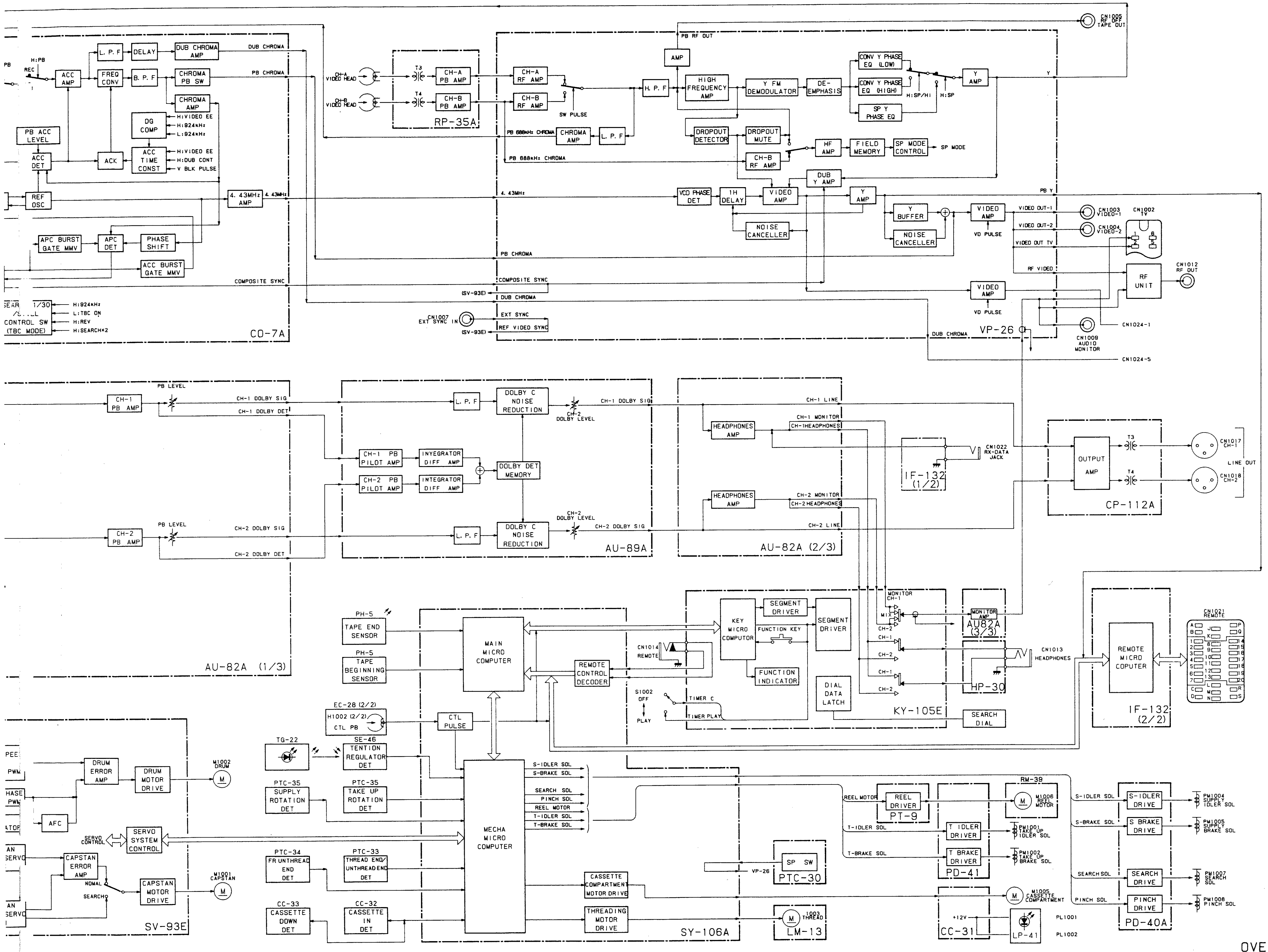
CN1005 RF OFF TAPE OUT
PB RF OUT
L. P. F
DELAY
DUB CHROMA AMP
DUB CHROMA
ACC AMP
FREQ CONV
B. P. F
CHROMA PB SW
PB CHROMA
CHROMA AMP
DG COMP
PB ACC LEVEL
ACC DET
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ACC TIME CONST
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APC DET
PHASE SHIFT
ACC BURST GATE MMV
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CN1014 REMOTE
S1002 OFF PLAY TIMER C TIMER PLAY
KEY MICRO COMPUTER
SEGMENT DRIVER
FUNCTION KEY
FUNCTION INDICATOR
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PTC-35 SUPPLY ROTATION DET
PTC-35 TAKE UP ROTATION DET
PTC-34 FR UNTHREAD END DET
PTC-33 THREAD END/UNTHREAD END DET
CC-33 CASSETTE DOWN DET
CC-32 CASSETTE IN DET
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PINCH SOL
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T-BRAKE SOL
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PM1005 SUPPLY BRAKE SOL
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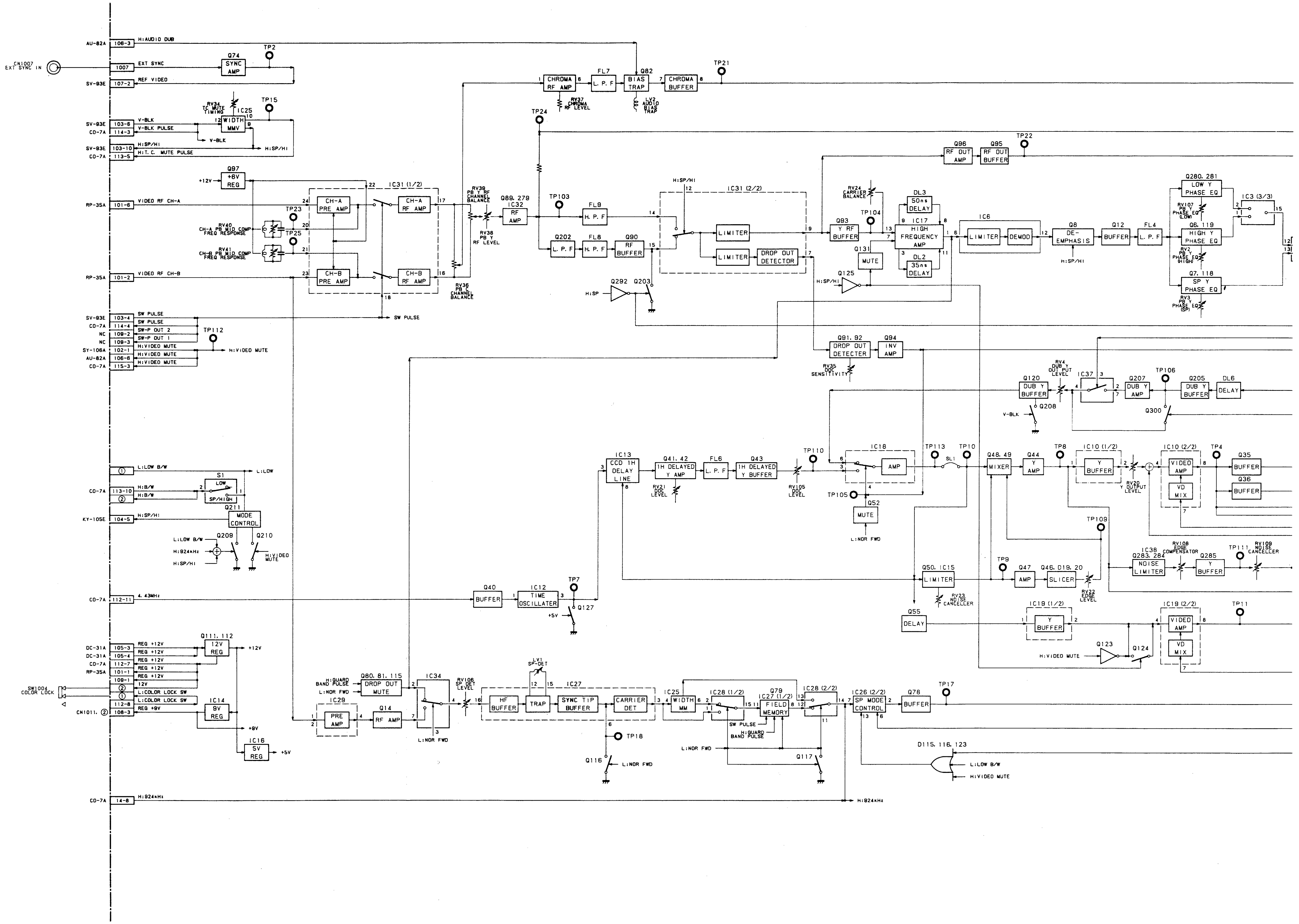
PM1008 PINCH SOL
PD-40A

OVERALL
VP-9000P

VIDEO SYSTEM
BLOCK DIAGRAM


AU-82A
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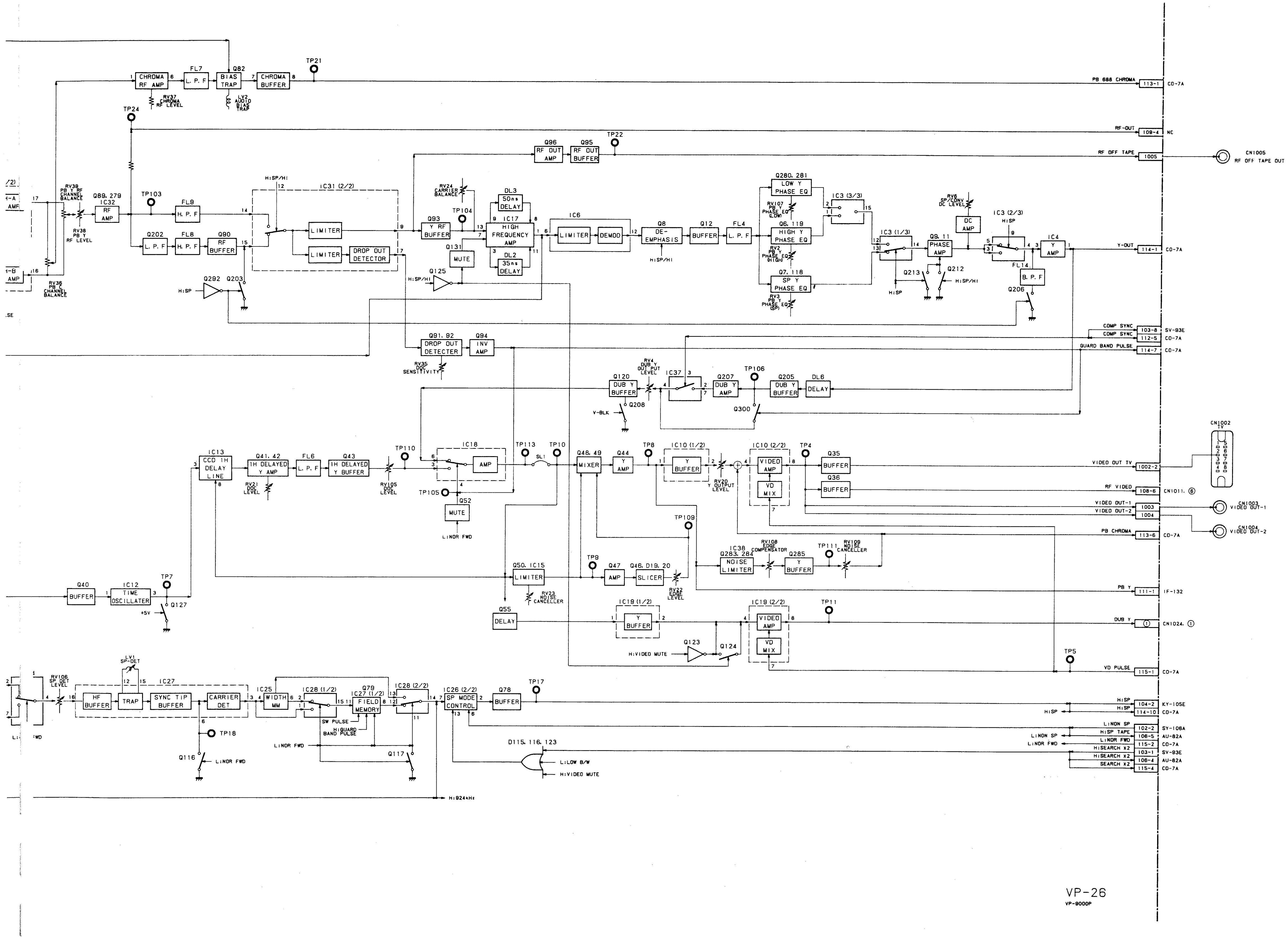
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Q43
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MUTE
L:NOR FWD
TP113
SL1
TP10
Q48, 49
MIXER
Q44
Y AMP
TP8
IC10 (1/2)
Y BUFFER
RV20 Y OUTPUT LEVEL
IC10 (2/2)
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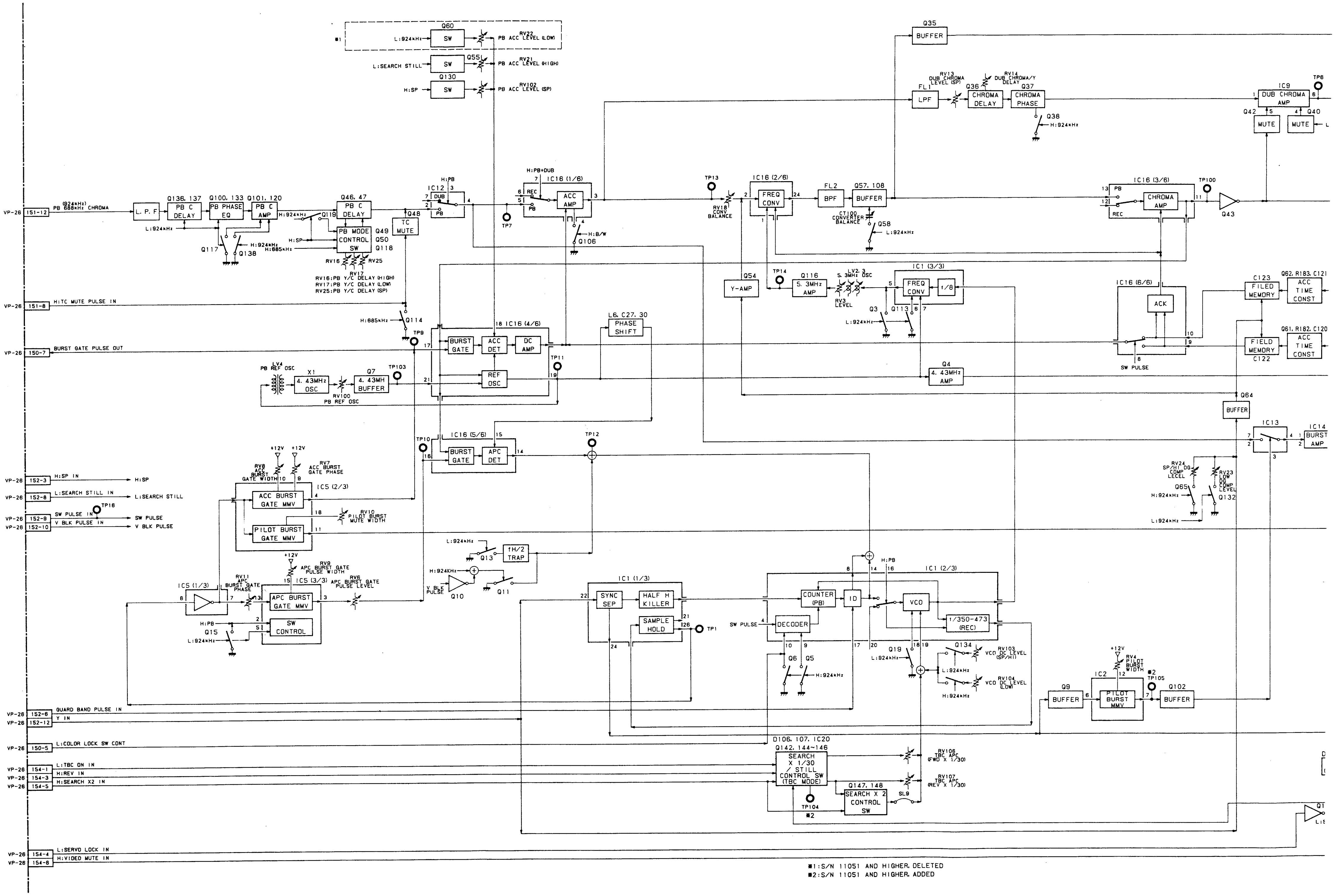
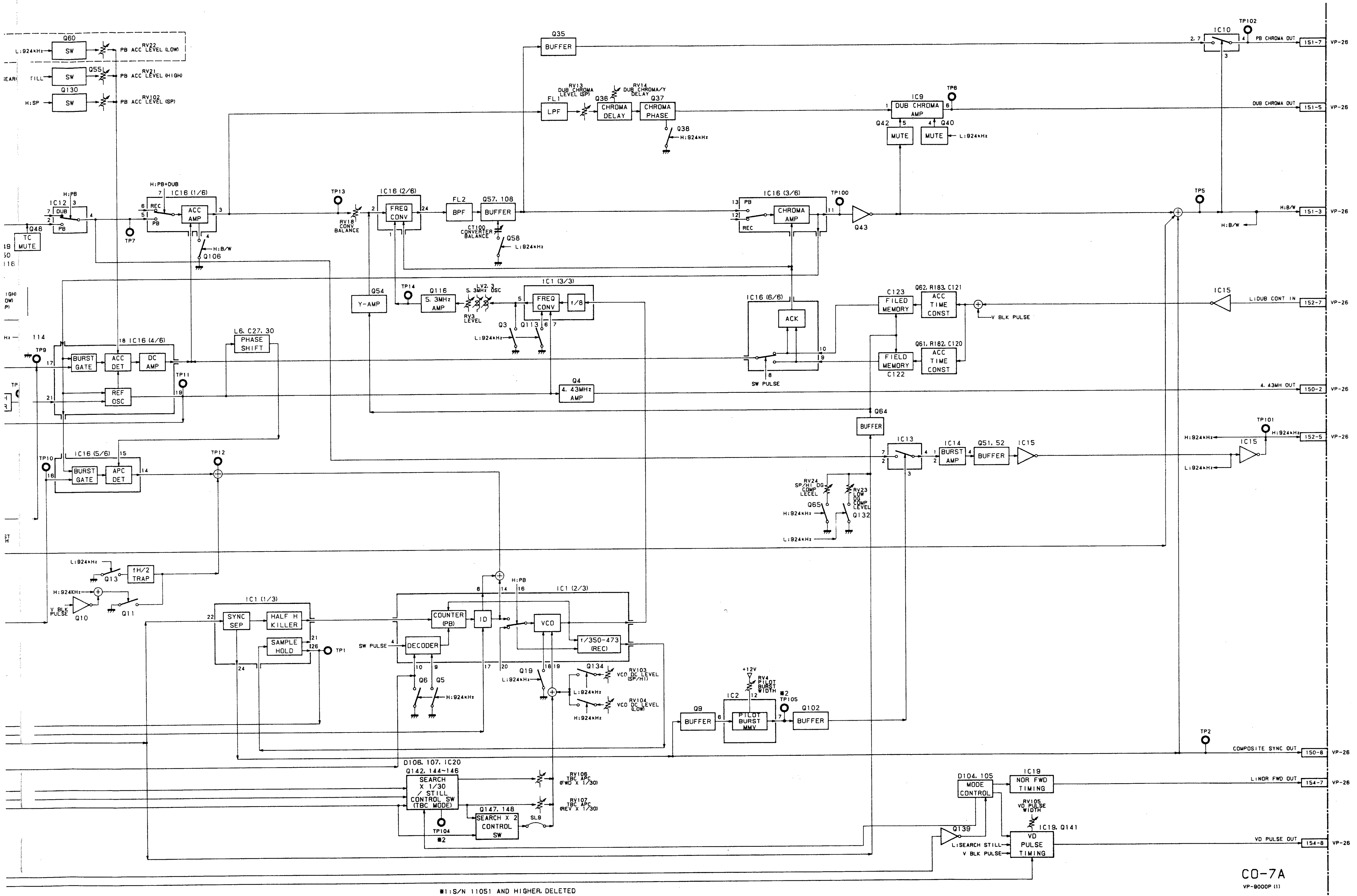
Y BUFFER
TP111
RV109 NOISE CANCELLER
Q40
BUFFER
IC12
TIME OSCILLATER
TP7
Q127
+5V
Q50, IC15
LIMITER
RV23 NOISE CANCELLER
TP9
Q47
AMP
Q46, D19, 20
SLICER
RV22 EDGE LEVEL
PB Y
111-1
IF-132
Q55
DELAY
IC19 (1/2)
Y BUFFER
IC19 (2/2)
VIDEO AMP
VD MIX
TP11
DUB Y
①
CN1024, ①
Q123
H:VIDEO MUTE
Q124
TP5
VD PULSE
115-1
CO-7A
RV106 SP DET LEVEL
LV1 SP-DET
IC27
HF BUFFER
TRAP
SYNC TIP BUFFER
CARRIER DET
TP18
Q116
L:NOR FWD
IC25
WIDTH MM
IC28 (1/2)
SW PULSE
H:GUARD BAND PULSE
Q79
IC27 (1/2)
FIELD MEMORY
IC28 (2/2)
L:NOR FWD
Q117
IC26 (2/2)
SP MODE CONTROL
Q78
BUFFER
TP17
D115, 116, 123
L:LOW B/W
H:VIDEO MUTE
H:924kHz
H:SP
104-2
KY-105E
H:SP
114-10
CO-7A
H:SP
L:NON SP
102-2
SY-106A
H:SP TAPE
106-5
AU-82A
L:NOR FWD
115-2
CO-7A
H:SEARCH x2
103-1
SV-93E
H:SEARCH x2
106-4
AU-82A
SEARCH x2
115-4
CO-7A
L:NON SP
L:NOR FWD

VP-26
VP-9000P

VIDEO SYSTEM BLOCK DIAGRAM


Q60
SW
RV22 PB ACC LEVEL (LOW)
L:924kHz
L:SEARCH STILL
Q55
RV21 PB ACC LEVEL (HIGH)
Q130
H:SP
RV102 PB ACC LEVEL (SP)
Q35
BUFFER
FL1
LPF
RV13 DUB CHROMA LEVEL (SP)
Q36
CHROMA DELAY
RV14 DUB CHROMA/Y DELAY
Q37
CHROMA PHASE
Q38
H:924kHz
IC9
DUB CHROMA AMP
TP6
Q42
MUTE
Q40
MUTE
VP-26
151-12
(924kHz) PB 688kHz CHROMA
L.P.F
Q136, 137
PB C DELAY
Q100, 133
PB PHASE EQ
Q101, 120
PB C AMP
H:924kHz
Q119
L:924kHz
Q117
Q138
H:924kHz
H:685kHz
Q46, 47
PB C DELAY
PB MODE CONTROL SW
Q49
Q50
Q118
H:SP
RV16
RV25
RV17
RV16:PB Y/C DELAY (HIGH)
RV17:PB Y/C DELAY (LOW)
RV25:PB Y/C DELAY (SP)
IC12
H:PB
DUB
PB
Q48
TC MUTE
H:PB+DUB
IC16 (1/6)
REC
PB
ACC AMP
H:B/W
Q106
TP7
TP13
RV18 CONV BALANCE
IC16 (2/6)
FREQ CONV
FL2
BPF
Q57, 108
BUFFER
CT100 CONVERTER BALANCE
Q58
L:924kHz
IC16 (3/6)
TP100
CHROMA AMP
REC
Q43
151-8
H:TC MUTE PULSE IN
H:685kHz
Q114
TP9
150-7
BURST GATE PULSE OUT
IC16 (4/6)
BURST GATE
ACC DET
DC AMP
TP11
L6, C27, 30
PHASE SHIFT
LV4 PB REF OSC
X1
4.43MHz OSC
RV100 PB REF OSC
Q7
4.43MH BUFFER
TP103
REF OSC
Q54
Y-AMP
TP14
Q116
5.3MHz AMP
LV2, 3 5.3MHz OSC
RV3 LEVEL
IC1 (3/3)
FREQ CONV
1/8
Q3
Q113
L:924kHz
Q4
4.43MHz AMP
IC16 (6/6)
ACK
SW PULSE
C123
FILED MEMORY
Q62, R183, C121
ACC TIME CONST
FIELD MEMORY
C122
Q61, R182, C120
ACC TIME CONST
Q64
BUFFER
IC13
IC14
BURST AMP
TP10
IC16 (5/6)
BURST GATE
APC DET
TP12
RV24 SP/H1 DO COMP LECEL
Q65
H:924kHz
RV23 LOW DO COMP LEVEL
Q132
L:924kHz
152-3
H:SP IN
H:SP
152-8
L:SEARCH STILL IN
L:SEARCH STILL
152-9
SW PULSE IN
TP16
SW PULSE
152-10
V BLK PULSE IN
V BLK PULSE
+12V
RV8 ACC BURST GATE WIDTH
RV7 ACC BURST GATE PHASE
IC5 (2/3)
ACC BURST GATE MMV
PILOT BURST GATE MMV
RV10 PILOT BURST MUTE WIDTH
RV9 APC BURST GATE PULSE WIDTH
RV11 APC BURST GATE PHASE
IC5 (3/3)
APC BURST GATE MMV
RV6 APC BURST GATE PULSE LEVEL
IC5 (1/3)
H:PB
Q15
L:924kHz
SW CONTROL
L:924kHz
Q13
1H/2 TRAP
H:924kHz
V BLK PULSE
Q10
Q11
IC1 (1/3)
SYNC SEP
HALF H KILLER
SAMPLE HOLD
TP1
SW PULSE
IC1 (2/3)
COUNTER (PB)
ID
VCO
H:PB
DECODER
1/350-473 (REC)
Q6
Q5
H:924kHz
Q19
L:924kHz
Q134
RV103 VCO DC LEVEL (SP/HI)
L:924kHz
RV104 VCO DC LEVEL (LOW)
H:924kHz
+12V
RV4 PILOT BURST WIDTH
IC2
PILOT BURST MMV
TP105
Q9
BUFFER
Q102
BUFFER
152-6
GUARD BAND PULSE IN
152-12
Y IN
150-5
L:COLOR LOCK SW CONT
D106, 107, IC20
Q142, 144~146
SEARCH X 1/30 / STILL CONTROL SW (TBC MODE)
RV106 TBC APC (FWD X 1/30)
RV107 TBC APC (REV X 1/30)
154-1
L:TBC ON IN
154-3
H:REV IN
154-5
H:SEARCH X2 IN
Q147, 148
SEARCH X 2 CONTROL SW
SL9
TP104
154-4
L:SERVO LOCK IN
154-6
H:VIDEO MUTE IN

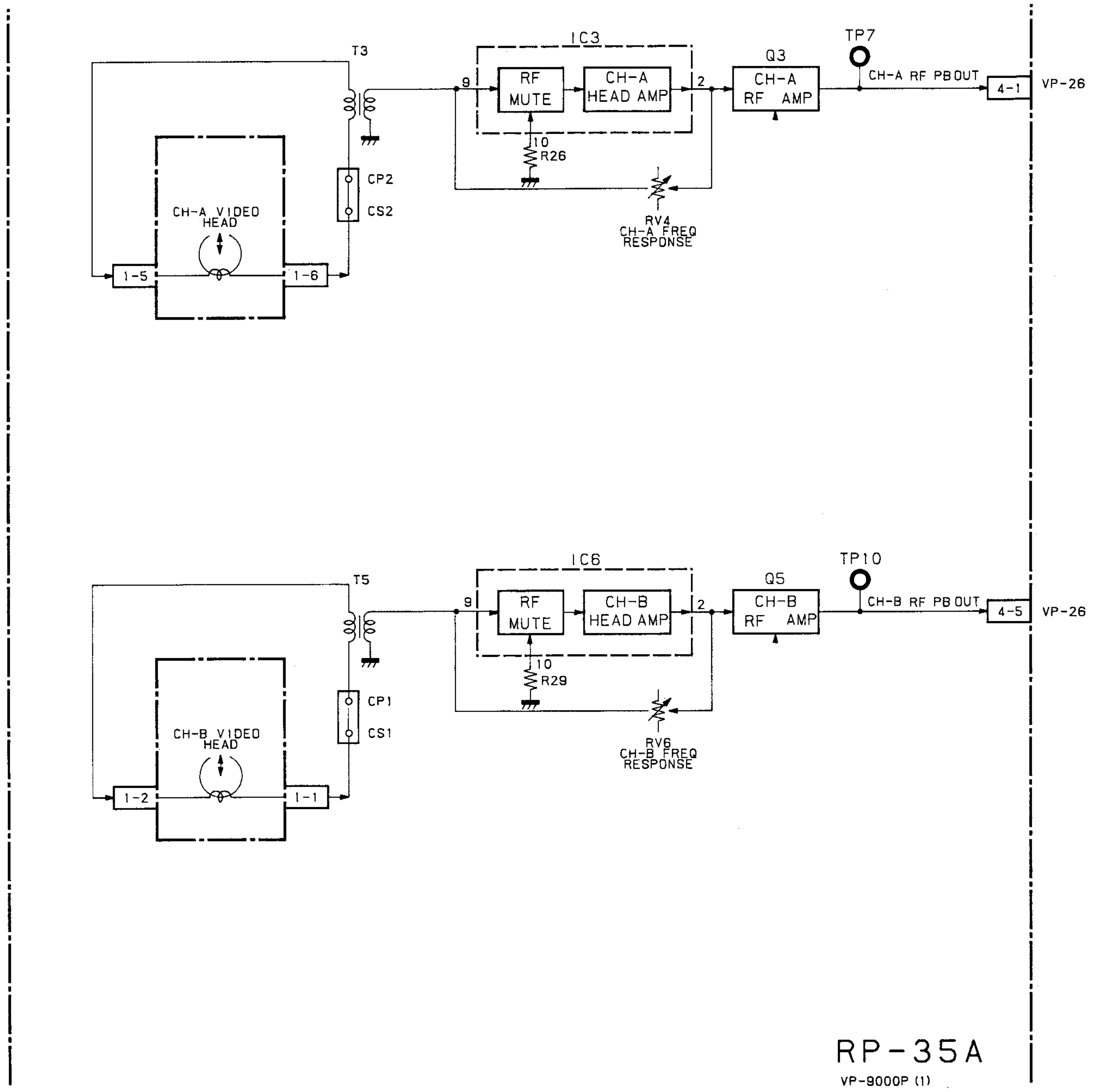
*1:S/N 11051 AND HIGHER, DELETED
*2:S/N 11051 AND HIGHER, ADDED


Q60
SW
RV22 PB ACC LEVEL (LOW)
Q55
SW
RV21 PB ACC LEVEL (HIGH)
Q130
SW
RV102 PB ACC LEVEL (SP)
L:924kHz
H:SP
IC12
DUB
PB
Q48
TC MUTE
H:PB+DUB
IC16 (1/6)
REC
PB
ACC AMP
Q106
H:B/W
TP7
TP13
RV18 CONV BALANCE
IC16 (2/6)
FREQ CONV
FL2
BPF
Q57, 108
BUFFER
CT100 CONVERTER BALANCE
Q58
L:924kHz
Q35
BUFFER
FL1
LPF
RV13 DUB CHROMA LEVEL (SP)
Q36
CHROMA DELAY
RV14 DUB CHROMA/Y DELAY
Q37
CHROMA PHASE
Q38
H:924kHz
IC9
DUB CHROMA AMP
TP6
Q42
MUTE
Q40
MUTE
L:924kHz
IC16 (3/6)
PB
REC
CHROMA AMP
TP100
Q43
IC10
TP102
PB CHROMA OUT
DUB CHROMA OUT
TP5
H:B/W
151-7
151-5
151-3
VP-26
Q54
Y-AMP
TP14
Q116
5.3MHz AMP
LV2, 3 5.3MHz OSC
RV3 LEVEL
IC1 (3/3)
FREQ CONV
1/8
Q3
Q113
L:924kHz
IC16 (6/6)
ACK
SW PULSE
C123
FILED MEMORY
Q62, R183, C121
ACC TIME CONST
V BLK PULSE
FIELD MEMORY
C122
Q61, R182, C120
ACC TIME CONST
IC15
L:DUB CONT IN
152-7
4.43MH OUT
150-2
IC16 (4/6)
BURST GATE
ACC DET
DC AMP
TP9
TP11
L6, C27, 30
PHASE SHIFT
REF OSC
Q4
4.43MHz AMP
Q64
BUFFER
IC13
IC14
BURST AMP
Q51, 52
BUFFER
IC15
TP101
H:924kHz
L:924kHz
152-5
RV24 SP/H/ DO COMP LEVEL
Q65
RV23 LOW DO COMP LEVEL
Q132
IC16 (5/6)
TP10
BURST GATE
APC DET
TP12
L:924kHz
Q13
1H/2 TRAP
H:924kHz
V BLK PULSE
Q10
Q11
IC1 (1/3)
SYNC SEP
HALF H KILLER
SAMPLE HOLD
TP1
H:PB
IC1 (2/3)
COUNTER (PB)
ID
VCO
1/350-473 (REC)
SW PULSE
DECODER
Q6
Q5
H:924kHz
Q19
L:924kHz
Q134
RV103 VCO DC LEVEL (SP/H)
RV104 VCO DC LEVEL (LOW)
H:924kHz
+12V
RV4 PILOT BURST WIDTH *1
IC2
PILOT BURST MMV
TP105 *2
Q9
BUFFER
Q102
BUFFER
TP2
COMPOSITE SYNC OUT
150-8
D106, 107, IC20
Q142, 144-146
SEARCH X 1/30 / STILL CONTROL SW (TBC MODE)
RV106 TBC APC (FWD X 1/30)
RV107 TBC APC (REV X 1/30)
Q147, 148
SEARCH X 2 CONTROL SW
SL9
TP104 *2
D104, 105
MODE CONTROL
IC19
NOR FWD TIMING
L:NOR FWD OUT
154-7
RV105 VD PULSE WIDTH
IC19, Q141
VD PULSE TIMING
Q139
L:SEARCH STILL
V BLK PULSE
VD PULSE OUT
154-8

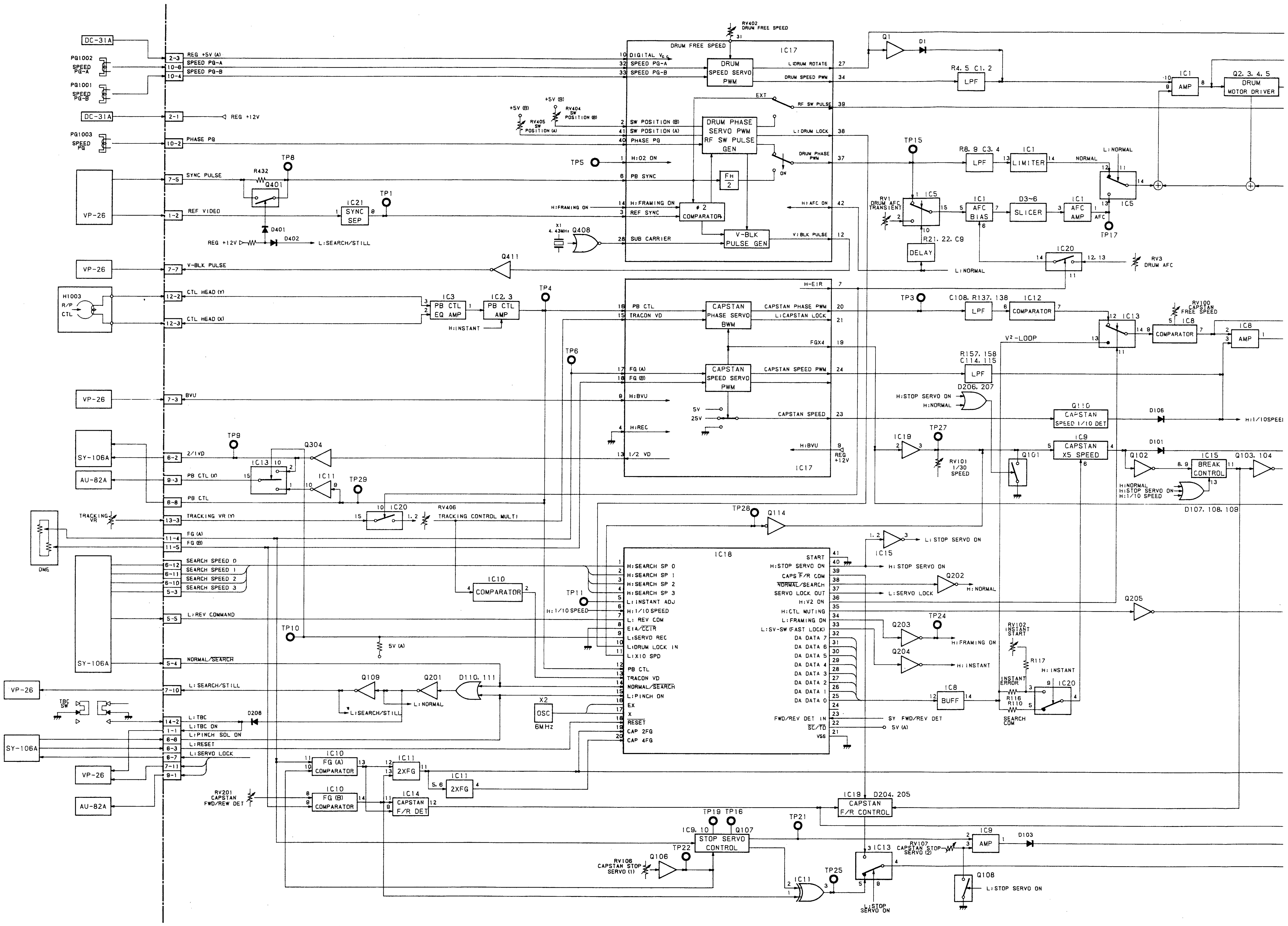
CO-7A
VP-9000P (1)

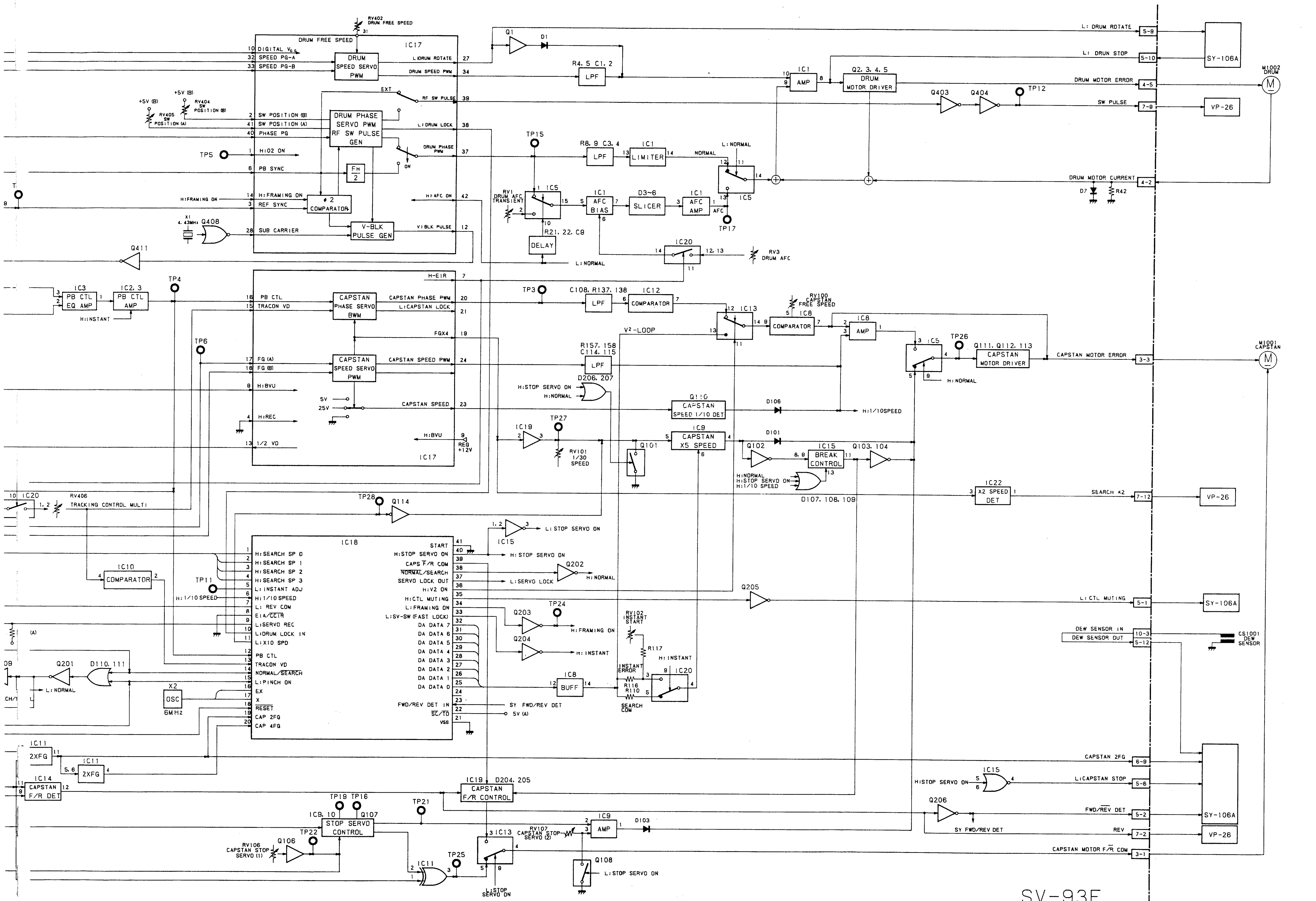
*1:S/N 11051 AND HIGHER DELETED
*2:S/N 11051 AND HIGHER ADDED

VIDEO SYSTEM BLOCK DIAGRAM


T3
IC3
Q3
TP7
CH-A VIDEO HEAD
1-5
1-6
CP2
CS2
9
RF MUTE
CH-A HEAD AMP
2
CH-A RF AMP
CH-A RF PB OUT
4-1
VP-26
10
R26
RV4
CH-A FREQ RESPONSE
T5
IC6
Q5
TP10
CH-B VIDEO HEAD
1-2
1-1
CP1
CS1
9
RF MUTE
CH-B HEAD AMP
2
CH-B RF AMP
CH-B RF PB OUT
4-5
VP-26
10
R29
RV6
CH-B FREQ RESPONSE
RP-35A
VP-9000P (1)

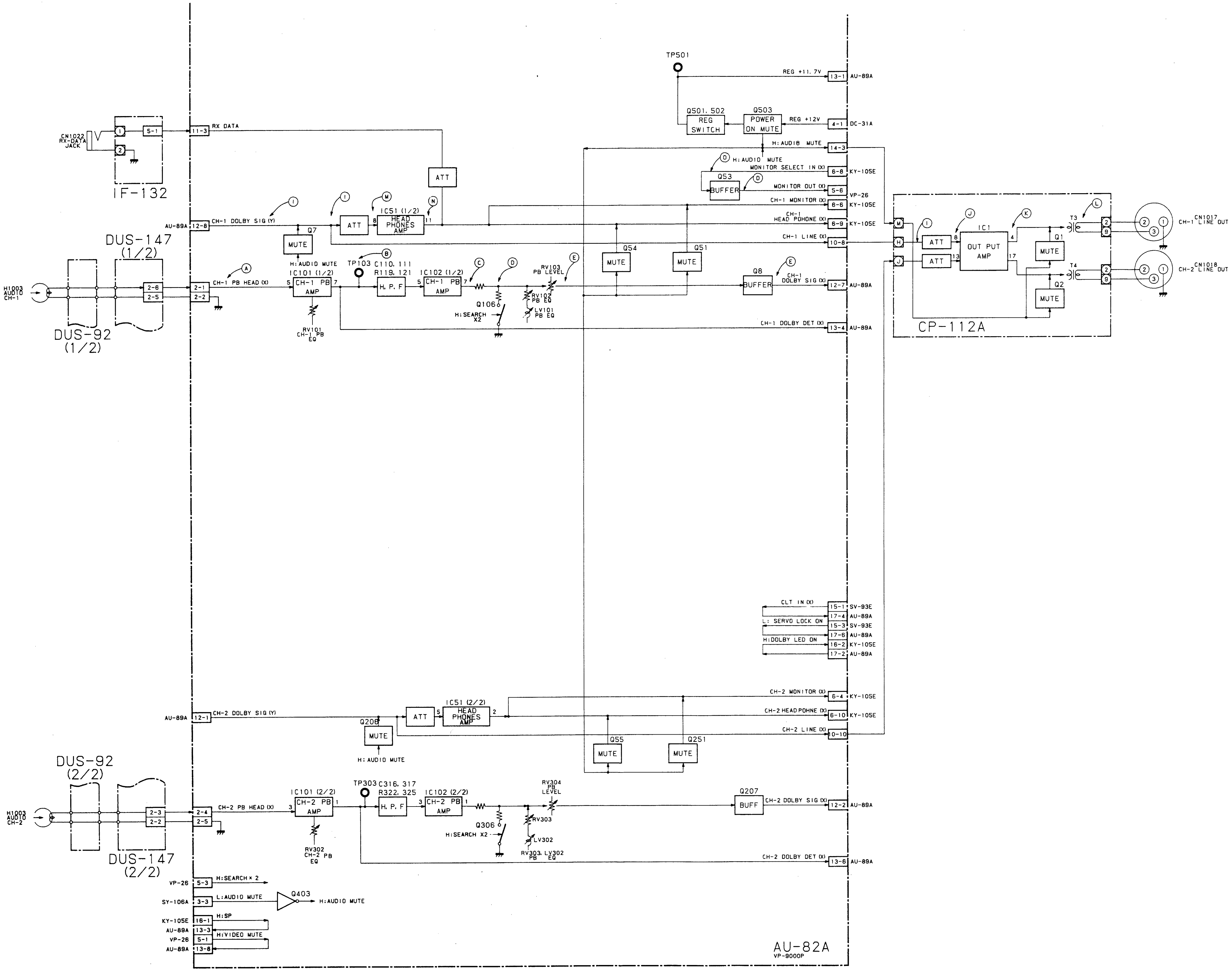
SERVO SYSTEM BLOCK DIAGRAM


DC-31A
PG1002 SPEED PG-A
PG1001 SPEED PG-B
PG1003 SPEED PG
VP-26
H1003 R/P CTL
SY-106A
AU-82A
DME
TRACKING VR
TBC SW
REG +5V (A)
SPEED PG-A
SPEED PG-B
REG +12V
PHASE PG
SYNC PULSE
REF VIDEO
V-BLK PULSE
CTL HEAD (Y)
CTL HEAD (X)
BVU
2/1VD
PB CTL (X)
PB CTL
TRACKING VR (Y)
FG (A)
FG (B)
SEARCH SPEED 0
SEARCH SPEED 1
SEARCH SPEED 2
SEARCH SPEED 3
L: REV COMMAND
NORMAL/SEARCH
L: SEARCH/STILL
L: TBC
L: TBC ON
L: PINCH SOL ON
L: RESET
L: SERVO LOCK
R432
Q401
TP8
TP1
IC21 SYNC SEP
D401
D402
L: SEARCH/STILL
Q411
IC3 PB CTL EQ AMP
IC2, 3 PB CTL AMP
H: INSTANT
TP4
TP6
TP9
IC13
Q304
IC11
TP29
IC20
RV406 TRACKING CONTROL MULTI
IC10 COMPARATOR
TP10
TP11
5V (A)
Q109
Q201
D110, 111
L: NORMAL
D208
IC10 FG (A) COMPARATOR
IC10 FG (B) COMPARATOR
RV201 CAPSTAN FWD/REW DET
IC11 2XFG
IC14 CAPSTAN F/R DET
X2 OSC 6MHz
RV402 DRUM FREE SPEED
RV405 SW POSITION (A)
RV404 SW POSITION (B)
TP5
IC17
DRUM SPEED SERVO PWM
DRUM PHASE SERVO PWM RF SW PULSE GEN
FH/2
÷2 COMPARATOR
V-BLK PULSE GEN
X1 4.43MHz
Q408
DIGITAL VCC
SW POSITION (B)
SW POSITION (A)
H: 1/2 ON
PB SYNC
H: FRAMING ON
REF SYNC
SUB CARRIER
L: DRUM ROTATE
DRUM SPEED PWM
RF SW PULSE
L: DRUM LOCK
DRUM PHASE PWM
H: AFC ON
V-BLK PULSE
CAPSTAN PHASE SERVO BWM
CAPSTAN SPEED SERVO PWM
H-EIR
PB CTL
TRACON VD
CAPSTAN PHASE PWM
L: CAPSTAN LOCK
FGX4
CAPSTAN SPEED PWM
H: BVU
H: REC
1/2 VD
CAPSTAN SPEED
REG +12V
TP28
Q114
IC18
H: SEARCH SP 0
H: SEARCH SP 1
H: SEARCH SP 2
H: SEARCH SP 3
L: INSTANT ADJ
H: 1/10 SPEED
L: REV COM
EIA/CCIR
L: SERVO REC
L: DRUM LOCK IN
L: X10 SPD
PB CTL
TRACON VD
NORMAL/SEARCH
L: PINCH ON
EX
X
RESET
CAP 2FG
CAP 4FG
START
H: STOP SERVO ON
CAPS F/R COM
NORMAL/SEARCH
SERVO LOCK OUT
H: V2 ON
H: CTL MUTING
L: FRAMING ON
L: SV-SW (FAST LOCK)
DA DATA 7
DA DATA 6
DA DATA 5
DA DATA 4
DA DATA 3
DA DATA 2
DA DATA 1
DA DATA 0
FWD/REV DET IN
SC/TD
VSS
SY FWD/REV DET
5V (A)
Q1
D1
R4, 5 C1, 2 LPF
IC1 AMP
Q2, 3, 4, 5 DRUM MOTOR DRIVER
TP15
R8, 9 C3, 4 LPF
IC1 LIMITER
NORMAL
L: NORMAL
RV1 DRUM AFC TRANSIENT
IC5
IC1 AFC BIAS
D3~6 SLICER
IC1 AFC AMP
TP17
R21, 22, C8 DELAY
IC20
RV3 DRUM AFC
L: NORMAL
TP3
C108, R137, 138 LPF
IC12 COMPARATOR
IC13
RV100 CAPSTAN FREE SPEED
IC8 COMPARATOR
IC8 AMP
V²-LOOP
R157, 158 C114, 115 LPF
D206, 207
H: STOP SERVO ON
H: NORMAL
Q110 CAPSTAN SPEED 1/10 DET
D106
H: 1/10SPEED
IC19
TP27
RV101 1/30 SPEED
Q101
IC9 CAPSTAN X5 SPEED
D101
Q102
IC15 BREAK CONTROL
Q103, 104
H: NORMAL
H: STOP SERVO ON
H: 1/10 SPEED
D107, 108, 109
IC15
L: STOP SERVO ON
Q202
H: NORMAL
L: SERVO LOCK
Q205
Q203
TP24
H: FRAMING ON
Q204
H: INSTANT
RV102 INSTANT START
R117
H: INSTANT
INSTANT ERROR
R116
R110
IC8 BUFF
IC20
SEARCH COM
IC19 D204, 205 CAPSTAN F/R CONTROL
TP19 TP16
IC9, 10 Q107 STOP SERVO CONTROL
TP21
TP22
Q106
RV106 CAPSTAN STOP SERVO (1)
IC11
TP25
IC13
RV107 CAPSTAN STOP SERVO (2)
IC9 AMP
D103
Q108
L: STOP SERVO ON
L: STOP SERVO ON

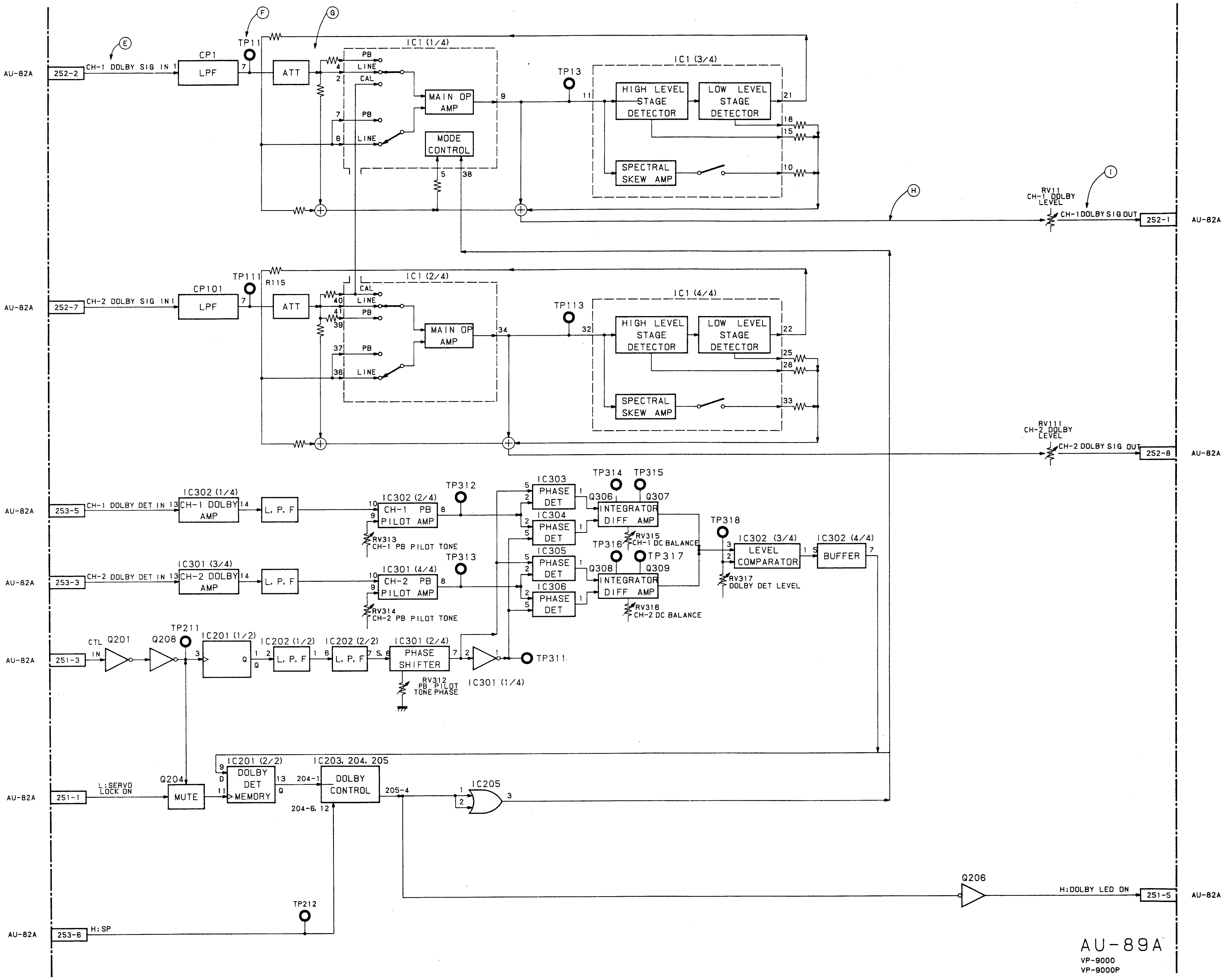

IC17
DRUM FREE SPEED
RV402 DRUM FREE SPEED
DIGITAL V_{SS}
SPEED PG-A
SPEED PG-B
DRUM SPEED SERVO PWM
L:DRUM ROTATE
DRUM SPEED PWM
EXT
RF SW PULSE
SW POSITION (B)
SW POSITION (A)
PHASE PG
DRUM PHASE SERVO PWM RF SW PULSE GEN
L:DRUM LOCK
DRUM PHASE PWM
H:02 ON
TP5
PB SYNC
FH/2
H:FRAMING ON
REF SYNC
#2 COMPARATOR
H:AFC ON
SUB CARRIER
V-BLK PULSE GEN
V:BLK PULSE
Q408
X1 4.43MHz
Q411
RV404 SW POSITION (B)
RV405 SW POSITION (A)
+5V (B)
Q1
D1
R4.5 C1.2
LPF
IC1
AMP
Q2.3.4.5 DRUM MOTOR DRIVER
L: DRUM ROTATE
L: DRUM STOP
DRUM MOTOR ERROR
SW PULSE
Q403
Q404
TP12
SY-106A
VP-26
M1002 DRUM
TP15
R8.9 C3.4
LIMITER
NORMAL
L:NORMAL
IC5
DRUM MOTOR CURRENT
D7
R42
RV1 DRUM AFC TRANSIENT
AFC BIAS
D3~6 SLICER
AFC AMP
AFC
TP17
R21.22 C8
DELAY
L:NORMAL
IC20
RV3 DRUM AFC
H-E!R
TP3
C108, R137, 138
IC12 COMPARATOR
RV100 CAPSTAN FREE SPEED
IC13
IC8 COMPARATOR
IC8 AMP
TP26
Q111, Q112, 113 CAPSTAN MOTOR DRIVER
CAPSTAN MOTOR ERROR
H:NORMAL
M1001 CAPSTAN
IC3 PB CTL EQ AMP
IC2.3 PB CTL AMP
H:INSTANT
TP4
PB CTL
TRACON VD
CAPSTAN PHASE SERVO BWM
CAPSTAN PHASE PWM
L:CAPSTAN LOCK
FGX4
V^2-LOOP
TP6
FG (A)
FG (B)
CAPSTAN SPEED SERVO PWM
CAPSTAN SPEED PWM
R157, 158 C114, 115
H:BVU
5V
25V
CAPSTAN SPEED
H:REC
H:STOP SERVO ON
H:NORMAL
D206, 207
Q110 CAPSTAN SPEED 1/10 DET
D106
H:1/10SPEED
REG +12V
1/2 VD
IC19
TP27
RV101 1/30 SPEED
Q101
IC9 CAPSTAN X5 SPEED
D101
Q102
IC15 BREAK CONTROL
Q103, 104
H:NORMAL
H:STOP SERVO ON
H:1/10 SPEED
D107, 108, 109
IC22 X2 SPEED DET
SEARCH X2
RV406 TRACKING CONTROL MULTI
TP28
Q114
IC15
L: STOP SERVO ON
IC18
IC10 COMPARATOR
TP11
H:1/10 SPEED
H:SEARCH SP 0
H:SEARCH SP 1
H:SEARCH SP 2
H:SEARCH SP 3
L: INSTANT ADJ
H:1/10 SPEED
L: REV COM
EIA/CCIR
L:SERVO REC
L:DRUM LOCK IN
L:X10 SPD
PB CTL
TRACON VD
NORMAL/SEARCH
L:PINCH ON
EX
X
RESET
CAP 2FG
CAP 4FG
START
H:STOP SERVO ON
CAPS F/R COM
NORMAL/SEARCH
SERVO LOCK OUT
H:V2 ON
H:CTL MUTING
L:FRAMING ON
L:SV-SW (FAST LOCK)
DA DATA 7
DA DATA 6
DA DATA 5
DA DATA 4
DA DATA 3
DA DATA 2
DA DATA 1
DA DATA 0
FWD/REV DET IN
SC/TD
VSS
H:STOP SERVO ON
Q202
H:NORMAL
L:SERVO LOCK
Q205
L: CTL MUTING
Q203
TP24
H:FRAMING ON
Q204
H: INSTANT
RV102 INSTANT START
R117
H: INSTANT
INSTANT ERROR
R116
R110
SEARCH COM
IC8 BUFF
SY FWD/REV DET
SV (A)
DEW SENSOR IN
DEW SENSOR OUT
CS1001 DEW SENSOR
Q201
D110, 111
L: NORMAL
X2 OSC 6MHz
IC11 2XFG
IC14 CAPSTAN F/R DET
IC19 D204, 205 CAPSTAN F/R CONTROL
CAPSTAN 2FG
H:STOP SERVO ON
L:CAPSTAN STOP
Q206
FWD/REV DET
SY FWD/REV DET
REV
CAPSTAN MOTOR F/R COM
TP19 TP16
IC9, 10 STOP SERVO CONTROL
Q107
TP21
TP22
RV106 CAPSTAN STOP SERVO (1)
Q106
IC11
TP25
IC13
RV107 CAPSTAN STOP SERVO (2)
IC9 AMP
D103
Q108
L:STOP SERVO ON
L:STOP SERVO ON

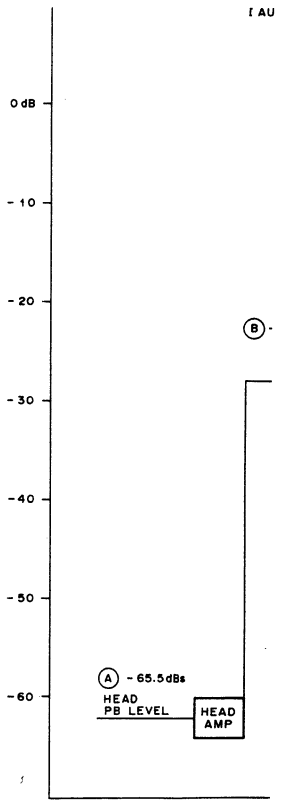
SV-93E
VP-8000P

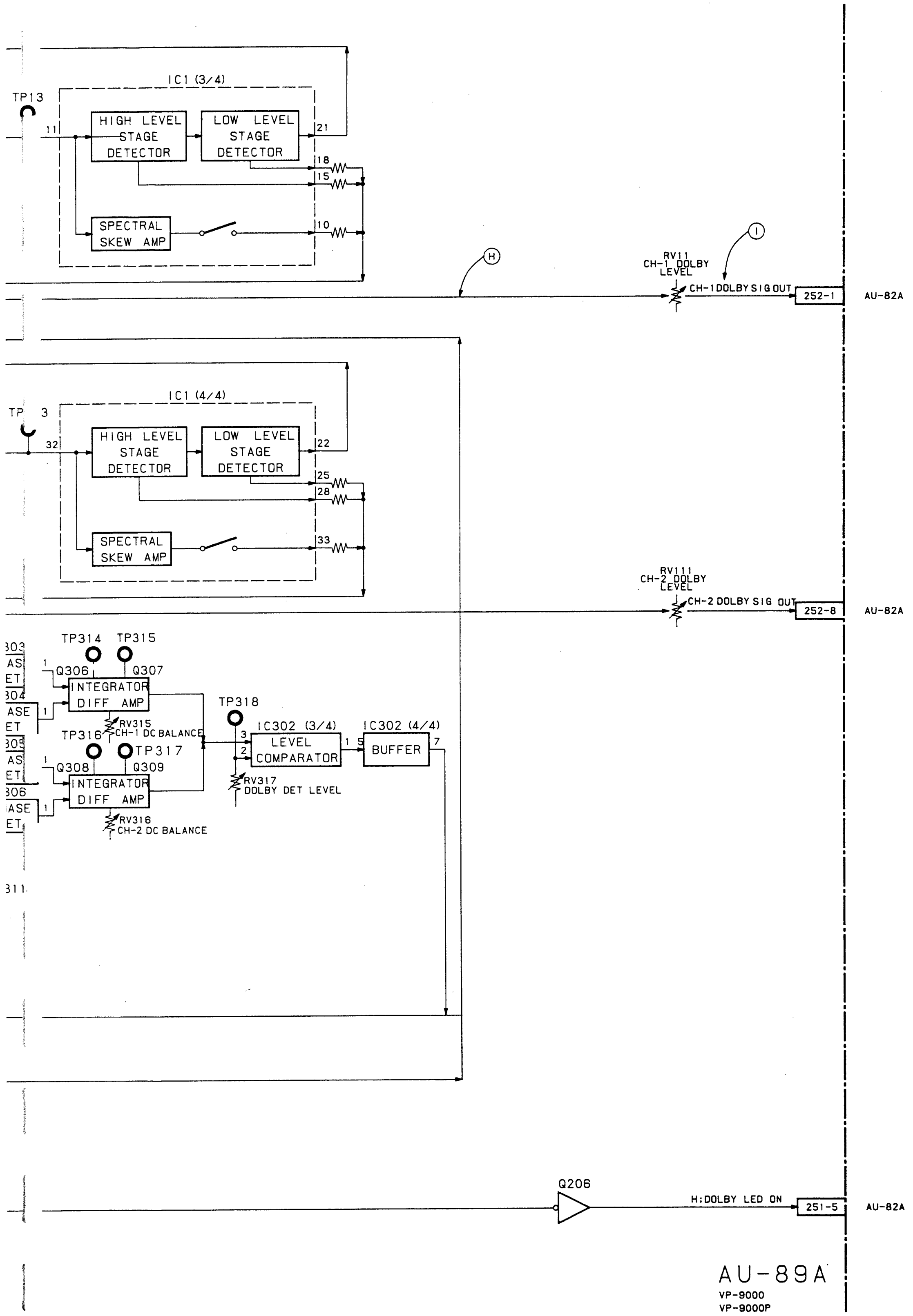
AUDIO SYSTEM BLOCK DIAGRAM


IF-132
CN1022 RX-DATA JACK
RX DATA
ATT
DUS-147 (1/2)
DUS-92 (1/2)
H1003 AUDIO CH-1
CH-1 DOLBY SIG (Y)
CH-1 PB HEAD (X)
Q7
MUTE
H:AUDIO MUTE
IC101 (1/2) CH-1 PB AMP
RV101 CH-1 PB EQ
TP103
C110, 111 R119, 121
H.P.F
IC102 (1/2) CH-1 PB AMP
Q106
H:SEARCH X2
RV103 PB LEVEL
RV102 PB EQ
LV101 PB EQ
IC51 (1/2) HEAD PHONES AMP
TP501
REG +11.7V
Q501, 502 REG SWITCH
Q503 POWER ON MUTE
REG +12V
H:AUDIO MUTE
MONITOR SELECT IN (X)
Q53 BUFFER
MONITOR OUT (X)
CH-1 MONITOR (X)
CH-1 HEAD POHONE (X)
CH-1 LINE (X)
Q54 MUTE
Q51 MUTE
Q8 BUFFER
CH-1 DOLBY SIG (X)
CH-1 DOLBY DET (X)
AU-89A
DC-31A
KY-105E
VP-26
CP-112A
ATT
IC1 OUT PUT AMP
Q1 MUTE
Q2 MUTE
T3
T4
CN1017 CH-1 LINE OUT
CN1018 CH-2 LINE OUT
CLT IN (X)
L: SERVO LOCK ON
H:DOLBY LED ON
SV-93E
CH-2 MONITOR (X)
CH-2 HEAD POHONE (X)
CH-2 LINE (X)
CH-2 DOLBY SIG (Y)
Q208 MUTE
IC51 (2/2) HEAD PHONES AMP
Q55 MUTE
Q251 MUTE
DUS-92 (2/2)
DUS-147 (2/2)
H1003 AUDIO CH-2
CH-2 PB HEAD (X)
IC101 (2/2) CH-2 PB AMP
RV302 CH-2 PB EQ
TP303
C316, 317 R322, 325
IC102 (2/2) CH-2 PB AMP
Q306
H:SEARCH X2
RV304 PB LEVEL
RV303
LV302
RV303, LV302 PB EQ
Q207 BUFF
CH-2 DOLBY SIG (X)
CH-2 DOLBY DET (X)
H:SEARCH×2
L:AUDIO MUTE
Q403
H:AUDIO MUTE
H:SP
H:VIDEO MUTE
SY-106A
AU-82A
VP-9000P

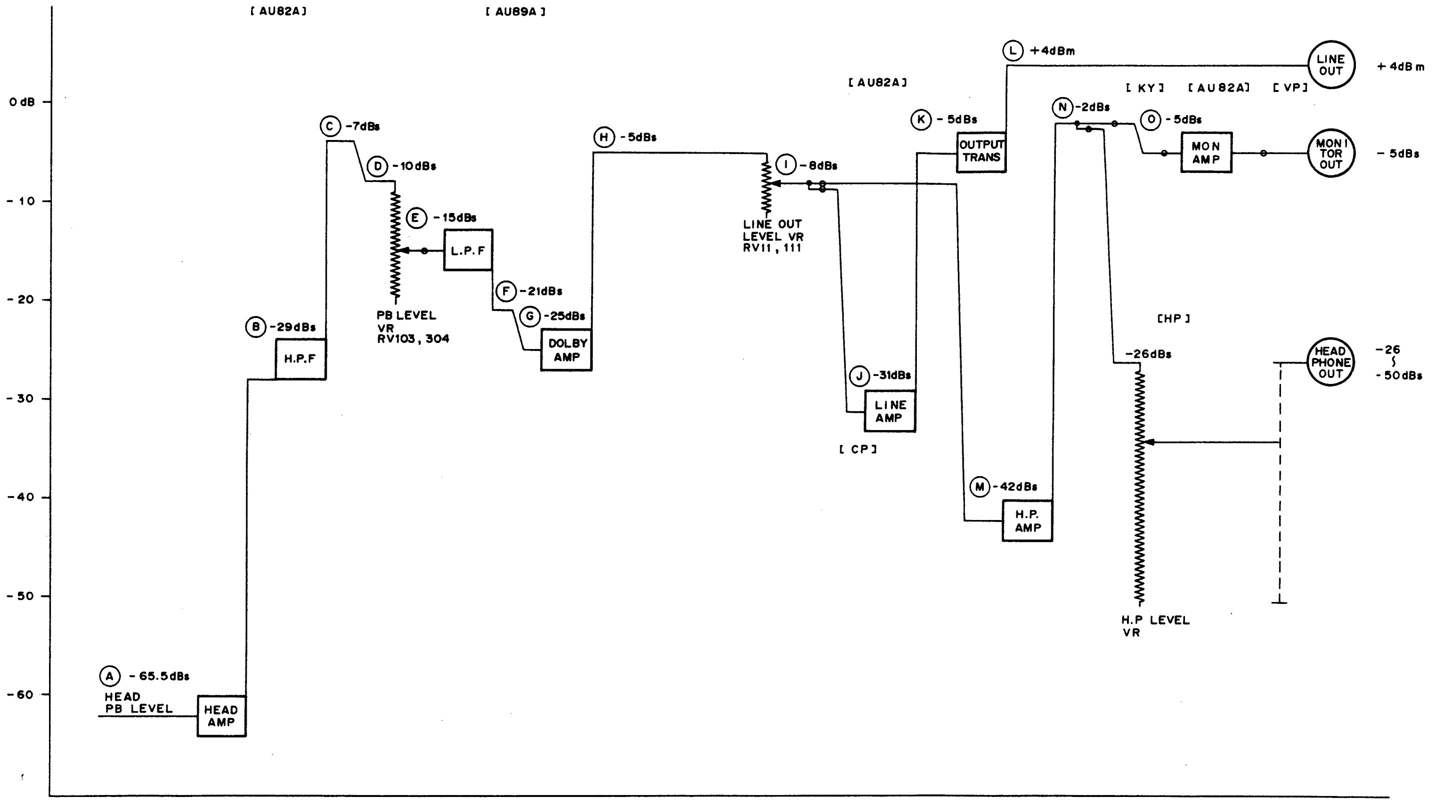
AUDIO SYSTEM BLOCK DIAGRAM


AU-82A
252-2
CH-1 DOLBY SIG IN 1
Ⓔ
CP1
LPF
TP11
Ⓕ
Ⓖ
ATT
IC1 (1/4)
PB
LINE
CAL
MAIN OP AMP
MODE CONTROL
TP13
IC1 (3/4)
HIGH LEVEL STAGE DETECTOR
LOW LEVEL STAGE DETECTOR
SPECTRAL SKEW AMP
Ⓗ
Ⓘ
RV11
CH-1 DOLBY LEVEL
CH-1 DOLBY SIG OUT
252-1
252-7
CH-2 DOLBY SIG IN 1
CP101
TP111
R115
IC1 (2/4)
TP113
IC1 (4/4)
RV111
CH-2 DOLBY LEVEL
CH-2 DOLBY SIG OUT
252-8
253-5
CH-1 DOLBY DET IN 1
IC302 (1/4)
CH-1 DOLBY AMP
L. P. F
IC302 (2/4)
CH-1 PB PILOT AMP
RV313
CH-1 PB PILOT TONE
TP312
IC303
PHASE DET
IC304
IC305
IC306
TP314
TP315
Q306
Q307
INTEGRATOR
DIFF AMP
RV315
CH-1 DC BALANCE
TP316
TP317
Q308
Q309
RV316
CH-2 DC BALANCE
TP318
IC302 (3/4)
LEVEL COMPARATOR
IC302 (4/4)
BUFFER
RV317
DOLBY DET LEVEL
253-3
CH-2 DOLBY DET IN 1
IC301 (3/4)
CH-2 DOLBY AMP
IC301 (4/4)
CH-2 PB PILOT AMP
RV314
CH-2 PB PILOT TONE
TP313
251-3
CTL IN
Q201
Q208
TP211
IC201 (1/2)
IC202 (1/2)
IC202 (2/2)
IC301 (2/4)
PHASE SHIFTER
RV312
PB PILOT TONE PHASE
IC301 (1/4)
TP311
251-1
L:SERVO LOCK ON
Q204
MUTE
IC201 (2/2)
DOLBY DET MEMORY
IC203, 204, 205
DOLBY CONTROL
204-1
204-6, 12
205-4
IC205
Q206
H:DOLBY LED ON
251-5
TP212
253-6
H:SP
AU-89A
VP-9000
VP-9000P

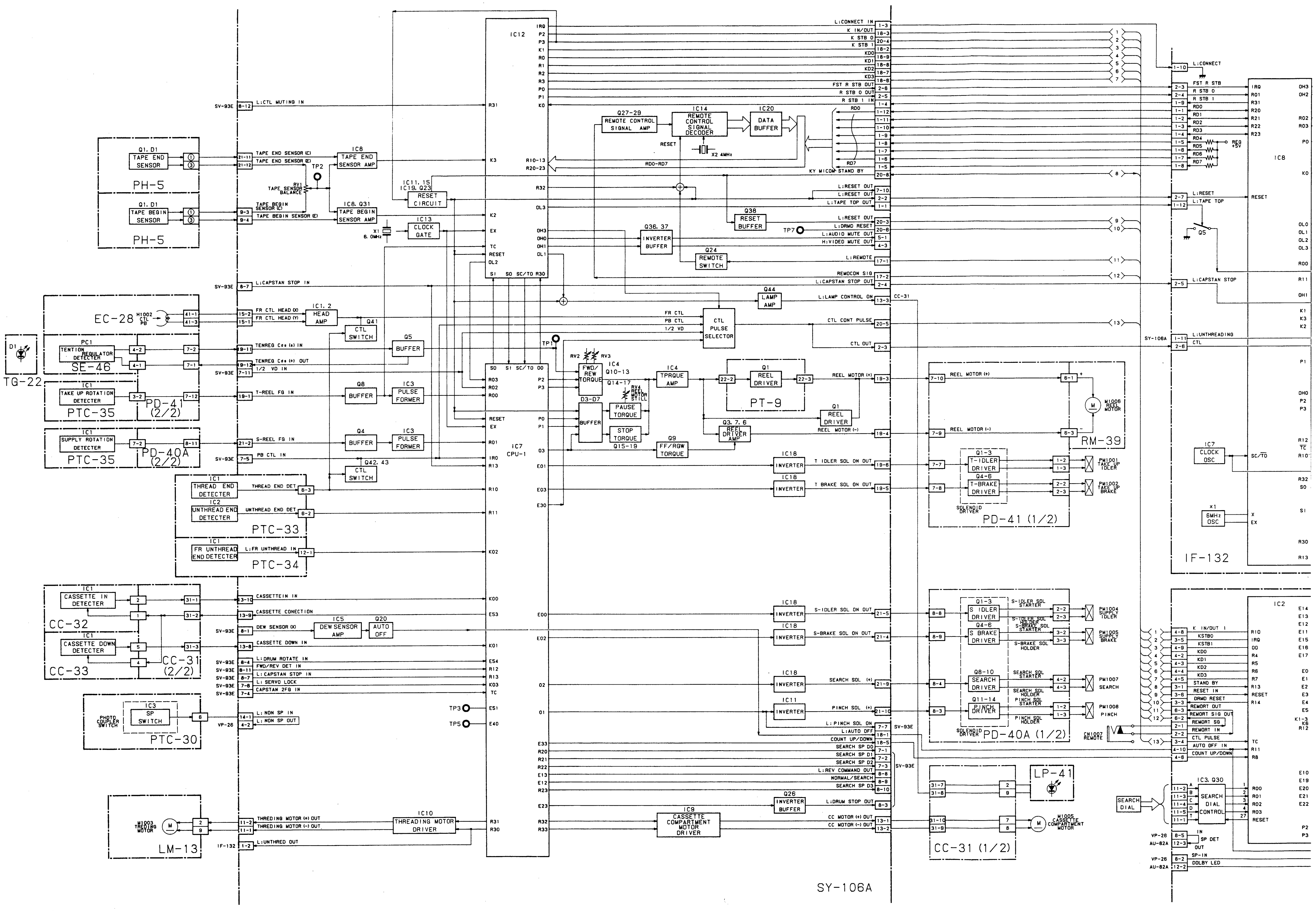

[AU
0dB
-10
-20
-30
-40
-50
-60
Ⓑ
Ⓐ -65.5dBs
HEAD PB LEVEL
HEAD AMP


TP13
11
IC1 (3/4)
HIGH LEVEL STAGE DETECTOR
LOW LEVEL STAGE DETECTOR
21
18
15
10
SPECTRAL SKEW AMP
H
I
RV11
CH-1 DOLBY LEVEL
CH-1 DOLBY SIG OUT
252-1
AU-82A
TP 3
32
IC1 (4/4)
HIGH LEVEL STAGE DETECTOR
LOW LEVEL STAGE DETECTOR
22
25
28
33
SPECTRAL SKEW AMP
RV111
CH-2 DOLBY LEVEL
CH-2 DOLBY SIG OUT
252-8
AU-82A
TP314
TP315
Q306
Q307
INTEGRATOR DIFF AMP
RV315
CH-1 DC BALANCE
TP316
TP317
Q308
Q309
INTEGRATOR DIFF AMP
RV316
CH-2 DC BALANCE
TP318
IC302 (3/4)
LEVEL COMPARATOR
RV317
DOLBY DET LEVEL
IC302 (4/4)
BUFFER
1
2
3
5
7
303
304
305
306
311
Q206
H:DOLBY LED ON
251-5
AU-82A
AU-89A
VP-9000
VP-9000P

Audio Level Diagram PB



SYSTEM CONTROL BLOCK DIAGRAM EK;10001 thru 11050


PH-5
TAPE END SENSOR
TAPE BEGIN SENSOR
IC8
TAPE END SENSOR AMP
TAPE BEGIN SENSOR AMP
TP2
IC11, 15
IC19, Q23
RESET CIRCUIT
IC13
CLOCK GATE
X1 6.0MHz
IC12
EC-28
TG-22
SE-46
TENSION REGULATOR DETECTER
PD-41 (2/2)
TAKE UP ROTATION DETECTER
PTC-35
PD-40A (2/2)
SUPPLY ROTATION DETECTER
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HEAD AMP
Q41
CTL SWITCH
Q5
BUFFER
Q8
BUFFER
IC3
PULSE FORMER
Q4
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UNTHREAD END DETECTER
PTC-34
FR UNTHREAD END DETECTER
CC-32
CASSETTE IN DETECTER
CC-33
CASSETTE DOWN DETECTER
CC-31 (2/2)
IC5
DEW SENSOR AMP
Q20
AUTO OFF
PTC-30
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SP SWITCH
LM-13
M1003 THREDING MOTOR
IC10
THREADING MOTOR DRIVER
IC7
CPU-1
TP1
TP3
TP5
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REMOTE CONTROL SIGNAL AMP
IC14
REMOTE CONTROL SIGNAL DECODER
IC20
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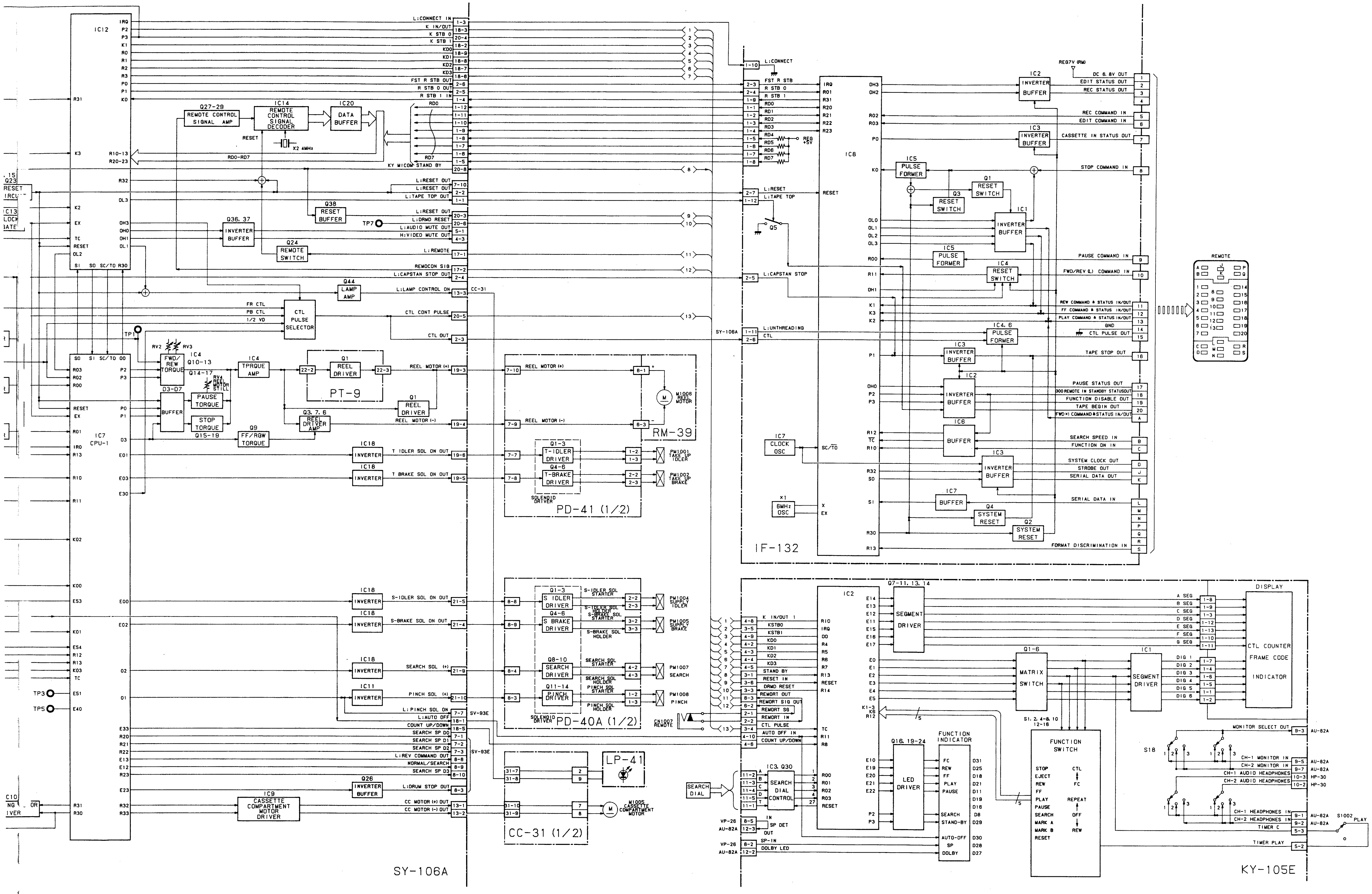
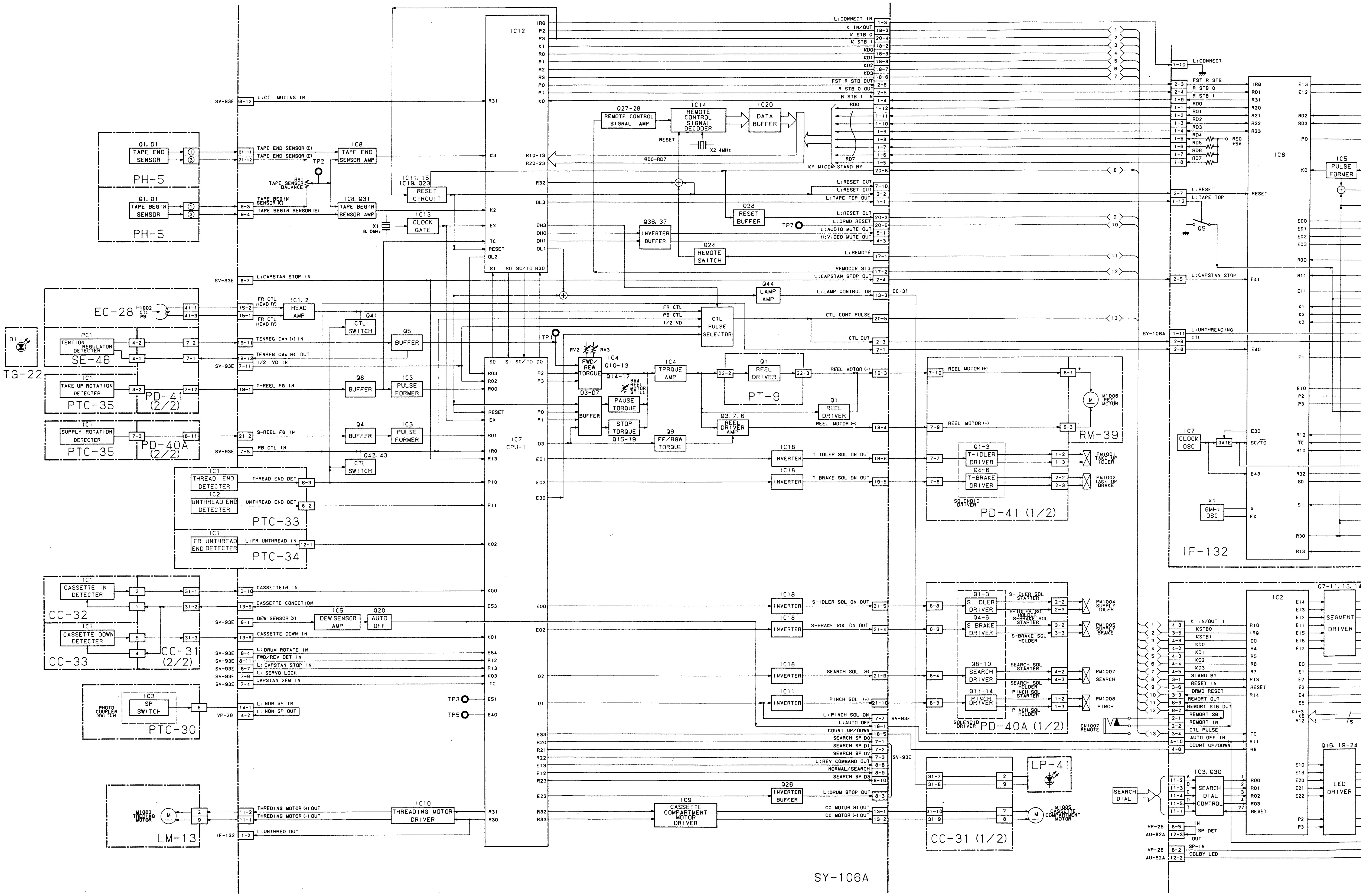
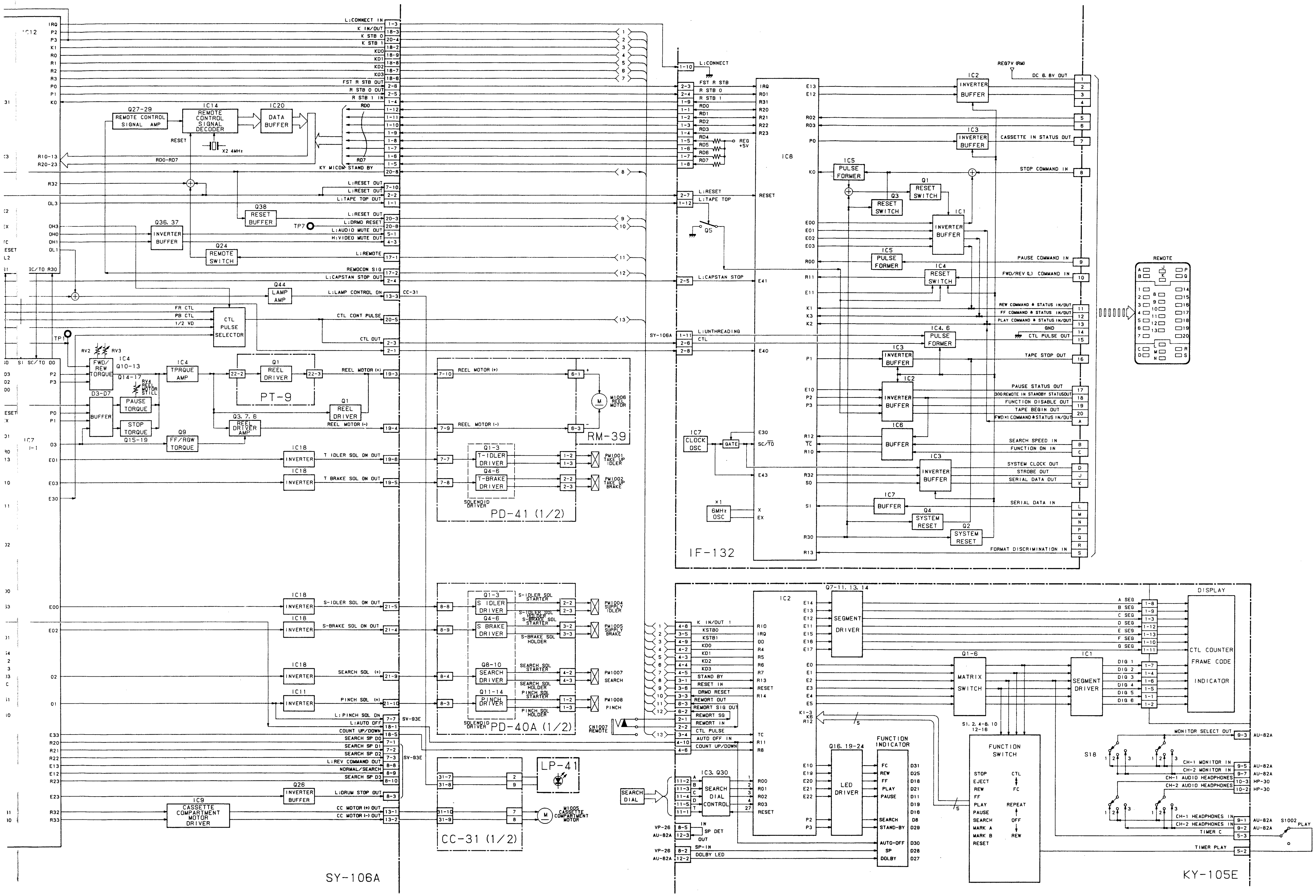
X2 4MHz
Q36, 37
INVERTER BUFFER
Q38
RESET BUFFER
TP7
Q24
REMOTE SWITCH
Q44
LAMP AMP
CTL PULSE SELECTOR
IC4
FWD/REW TORQUE
Q10-13
Q14-17
D3-D7
BUFFER
PAUSE TORQUE
STOP TORQUE
Q15-19
Q9
FF/RGW TORQUE
TPRQUE AMP
PT-9
Q1
REEL DRIVER
Q3, 7, 6
REEL DRIVER AMP
IC18
INVERTER
IC11
INVERTER
Q26
INVERTER BUFFER
IC9
CASSETTE COMPARTMENT MOTOR DRIVER
SY-106A
RM-39
M1006 REEL MOTOR
PD-41 (1/2)
T-IDLER DRIVER
T-BRAKE DRIVER
SOLENOID DRIVER
PM1001 TAKE UP IDLER
PM1002 TAKE UP BRAKE
PD-40A (1/2)
S IDLER DRIVER
S BRAKE DRIVER
SEARCH DRIVER
PINCH DRIVER
PM1004 SUPPLY IDLER
PM1005 SUPPLY BRAKE
PM1007 SEARCH
PM1008 PINCH
CN1002 REMOTE
LP-41
CC-31 (1/2)
M1005 CASSETTE COMPARTMENT MOTOR
IF-132
IC8
Q5
IC7
CLOCK OSC
X1
6MHz OSC
IC2
IC3, Q30
SEARCH DIAL CONTROL
SEARCH DIAL


IC12
IC7
CPU-1
IC14
REMOTE CONTROL SIGNAL DECODER
IC20
DATA BUFFER
Q27-28
REMOTE CONTROL SIGNAL AMP
X2 4MHz
RESET
RD0-RD7
KY MICOM STAND BY
Q38
RESET BUFFER
TP7
Q36, 37
INVERTER BUFFER
Q24
REMOTE SWITCH
Q44
LAMP AMP
CTL PULSE SELECTOR
FR CTL
PB CTL
1/2 VD
TP1
RV2
RV3
IC4
FWD/REW TORQUE
Q10-13
Q14-17
RV4 REEL MOTOR STILL
D3-D7
BUFFER
PAUSE TORQUE
STOP TORQUE
Q15-19
Q9
FF/REW TORQUE
IC4
TPRQUE AMP
Q1
REEL DRIVER
PT-9
Q3, 7, 6
REEL DRIVER AMP
REEL MOTOR (+)
REEL MOTOR (−)
M1006 REEL MOTOR
RM-39
IC18
INVERTER
T IDLER SOL ON OUT
T BRAKE SOL ON OUT
Q1-3
T-IDLER DRIVER
Q4-6
T-BRAKE DRIVER
SOLENOID DRIVER
PM1001 TAKE UP IDLER
PM1002 TAKE UP BRAKE
PD-41 (1/2)
S-IDLER SOL ON OUT
S-BRAKE SOL ON OUT
S IDLER DRIVER
S BRAKE DRIVER
Q8-10
SEARCH DRIVER
Q11-14
PINCH DRIVER
SEARCH SOL (+)
IC11
PINCH SOL (+)
PM1004 SUPPLY IDLER
PM1005 SUPPLY BRAKE
PM1007 SEARCH
PM1008 PINCH
PD-40A (1/2)
CN1007 REMOTE
SV-93E
Q26
INVERTER BUFFER
L:DRUM STOP OUT
IC9
CASSETTE COMPARTMENT MOTOR DRIVER
CC MOTOR (+) OUT
CC MOTOR (−) OUT
M1005 CASSETTE COMPARTMENT MOTOR
CC-31 (1/2)
LP-41
TP3
TP5
SY-106A
L:CONNECT IN
K IN/OUT
K STB 0
K STB 1
FST R STB OUT
R STB 0 OUT
R STB 1 IN
L:RESET OUT
L:TAPE TOP OUT
L:DRMO RESET
L:AUDIO MUTE OUT
H:VIDEO MUTE OUT
L:REMOTE
REMOCON SIG
L:CAPSTAN STOP OUT
L:LAMP CONTROL ON
CTL CONT PULSE
CTL OUT
L:PINCH SOL ON
L:AUTO OFF
COUNT UP/DOWN
SEARCH SP D0
SEARCH SP D1
SEARCH SP D2
L:REV COMMAND OUT
NORMAL/SEARCH
SEARCH SP D3
IC8
IC7
CLOCK OSC
X1
6MHz OSC
REG +5V
REG7V
Q5
L:UNTHREADING
IC2
INVERTER BUFFER
IC3
INVERTER BUFFER
IC5
PULSE FORMER
Q1
RESET SWITCH
Q3
RESET SWITCH
IC1
INVERTER BUFFER
IC4
RESET SWITCH
IC4, 6
PULSE FORMER
IC6
BUFFER
IC7
BUFFER
Q4
SYSTEM RESET
Q2
SYSTEM RESET
IF-132
DC 6.8V OUT
EDIT STATUS OUT
REC STATUS OUT
REC COMMAND IN
EDIT COMMAND IN
CASSETTE IN STATUS OUT
STOP COMMAND IN
PAUSE COMMAND IN
FWD/REV (L) COMMAND IN
REW COMMAND & STATUS IN/OUT
FF COMMAND & STATUS IN/OUT
PLAY COMMAND & STATUS IN/OUT
GND
CTL PULSE OUT
TAPE STOP OUT
PAUSE STATUS OUT
DOO REMOTE IN STANDBY STATUS OUT
FUNCTION DISABLE OUT
TAPE BEGIN OUT
FWD×1 COMMAND & STATUS IN/OUT
SEARCH SPEED IN
FUNCTION ON IN
SYSTEM CLOCK OUT
STROBE OUT
SERIAL DATA OUT
SERIAL DATA IN
FORMAT DISCRIMINATION IN
REMOTE
IC2
Q7-11, 13, 14
SEGMENT DRIVER
Q1-6
MATRIX SWITCH
IC1
SEGMENT DRIVER
DISPLAY
CTL COUNTER FRAME CODE INDICATOR
A SEG
B SEG
C SEG
D SEG
E SEG
F SEG
G SEG
DIG 1
DIG 2
DIG 3
DIG 4
DIG 5
DIG 6
K IN/OUT 1
KSTB0
KSTB1
STAND BY
RESET IN
DRMO RESET
REMORT OUT
REMORT SIG OUT
REMORT SG
REMORT IN
CTL PULSE
AUTO OFF IN
COUNT UP/DOWN
IC3, Q30
SEARCH DIAL CONTROL
SEARCH DIAL
SP DET
SP-IN
DOLBY LED
Q16, 19-24
LED DRIVER
FUNCTION INDICATOR
FC
REW
FF
PLAY
PAUSE
SEARCH
STAND-BY
AUTO-OFF
SP
DOLBY
S1, 2, 4-8, 10, 12-16
FUNCTION SWITCH
STOP
EJECT
REW
FF
PLAY
PAUSE
SEARCH
MARK A
MARK B
RESET
CTL
FC
REPEAT
OFF
REW
MONITOR SELECT OUT
S18
CH-1 MONITOR IN
CH-2 MONITOR IN
CH-1 AUDIO HEADPHONES
CH-2 AUDIO HEADPHONES
CH-1 HEADPHONES IN
CH-2 HEADPHONES IN
TIMER C
TIMER PLAY
S1002 PLAY
AU-82A
HP-30
VP-26
KY-105E

SYSTEM CONTROL BLOCK DIAGRAM EK ; 11051 and higher


IC12
IC7
CPU-1
PH-5
TAPE END SENSOR
TAPE BEGIN SENSOR
IC8
TAPE END SENSOR AMP
TAPE BEGIN SENSOR AMP
TP2
RESET CIRCUIT
CLOCK GATE
EC-28
TG-22
SE-46
TENSION REGULATOR DETECTER
PD-41 (2/2)
PTC-35
TAKE UP ROTATION DETECTER
SUPPLY ROTATION DETECTER
PD-40A (2/2)
HEAD AMP
CTL SWITCH
BUFFER
PULSE FORMER
THREAD END DETECTER
UNTHREAD END DETECTER
PTC-33
FR UNTHREAD END DETECTER
PTC-34
CASSETTE IN DETECTER
CC-32
CASSETTE DOWN DETECTER
CC-33
CC-31 (2/2)
DEW SENSOR AMP
AUTO OFF
SP SWITCH
PHOTO COUPLER SWITCH
PTC-30
LM-13
M1003 THREADING MOTOR
THREADING MOTOR DRIVER
TP3
TP5
REMOTE CONTROL SIGNAL AMP
REMOTE CONTROL SIGNAL DECODER
DATA BUFFER
RESET BUFFER
TP7
INVERTER BUFFER
REMOTE SWITCH
LAMP AMP
CTL PULSE SELECTOR
TP1
FWD/REW TORQUE
PAUSE TORQUE
STOP TORQUE
FF/RGW TORQUE
TORQUE AMP
REEL DRIVER
PT-9
REEL DRIVER AMP
INVERTER
RM-39
M1006 REEL MOTOR
T-IDLER DRIVER
T-BRAKE DRIVER
PD-41 (1/2)
S IDLER DRIVER
S BRAKE DRIVER
SEARCH DRIVER
PINCH DRIVER
PD-40A (1/2)
PM1004 SUPPLY IDLER
PM1005 SUPPLY BRAKE
PM1007 SEARCH
PM1008 PINCH
LP-41
CASSETTE COMPARTMENT MOTOR DRIVER
M1005 CASSETTE COMPARTMENT MOTOR
CC-31 (1/2)
SY-106A
IF-132
IC8
PULSE FORMER
CLOCK OSC
GATE
6MHz OSC
IC2
SEGMENT DRIVER
LED DRIVER
SEARCH DIAL
SEARCH DIAL CONTROL


SY-106A
IF-132
KY-105E
PT-9
RM-39
PD-41 (1/2)
PD-40A (1/2)
CC-31 (1/2)
LP-41
REMOTE CONTROL SIGNAL AMP
Q27-29
IC14 REMOTE CONTROL SIGNAL DECODER
IC20 DATA BUFFER
X2 4MHz
Q38 RESET BUFFER
Q36, 37 INVERTER BUFFER
Q24 REMOTE SWITCH
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TP1
Q44 LAMP AMP
CTL PULSE SELECTOR
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IC4 Q10-13
Q14-17
IC4 TPRQUE AMP
Q1 REEL DRIVER
Q3, 7, 6 REEL DRIVER AMP
D3-D7 BUFFER
PAUSE TORQUE
STOP TORQUE
Q15-19
Q9 FF/RGW TORQUE
IC18 INVERTER
IC11 INVERTER
IC9 CASSETTE COMPARTMENT MOTOR DRIVER
Q26 INVERTER BUFFER
M1006 REEL MOTOR
Q1-3 T-IDLER DRIVER
Q4-6 T-BRAKE DRIVER
PM1001 TAKE UP IDLER
PM1002 TAKE UP BRAKE
SOLENOID DRIVER
S IDLER DRIVER
S BRAKE DRIVER
Q8-10 SEARCH DRIVER
Q11-14 PINCH DRIVER
PM1004 SUPPLY IDLER
PM1005 SUPPLY BRAKE
PM1007 SEARCH
PM1008 PINCH
M1005 CASSETTE COMPARTMENT MOTOR
CN1007 REMOTE
SEARCH DIAL
IC3, Q30 SEARCH DIAL CONTROL
IC8
IC2 INVERTER BUFFER
IC3 INVERTER BUFFER
IC5 PULSE FORMER
Q1 RESET SWITCH
Q3 RESET SWITCH
IC1 INVERTER BUFFER
IC4 RESET SWITCH
IC4, 6 PULSE FORMER
IC6 BUFFER
IC7 BUFFER
IC7 CLOCK OSC
GATE
X1 6MHz OSC
Q4 SYSTEM RESET
Q2 SYSTEM RESET
REG7V OUT
DC 6.8V OUT
CASSETTE IN STATUS OUT
STOP COMMAND IN
PAUSE COMMAND IN
FWD/REV (L) COMMAND IN
REW COMMAND & STATUS IN/OUT
FF COMMAND & STATUS IN/OUT
PLAY COMMAND & STATUS IN/OUT
GND
CTL PULSE OUT
TAPE STOP OUT
PAUSE STATUS OUT
300 REMOTE IN STANDBY STATUS OUT
FUNCTION DISABLE OUT
TAPE BEGIN OUT
FWD×1 COMMAND & STATUS IN/OUT
SEARCH SPEED IN
FUNCTION ON IN
SYSTEM CLOCK OUT
STROBE OUT
SERIAL DATA OUT
SERIAL DATA IN
FORMAT DISCRIMINATION IN
REMOTE
IC2
Q7-11, 13, 14 SEGMENT DRIVER
Q1-6 MATRIX SWITCH
IC1 SEGMENT DRIVER
DISPLAY
CTL COUNTER FRAME CODE INDICATOR
Q16, 19-24 LED DRIVER
FUNCTION INDICATOR
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CTL FC REPEAT OFF REW
S18
MONITOR SELECT OUT
CH-1 MONITOR IN
CH-2 MONITOR IN
CH-1 AUDIO HEADPHONES
CH-2 AUDIO HEADPHONES
CH-1 HEADPHONES IN
CH-2 HEADPHONES IN
TIMER C
TIMER PLAY
S1002 PLAY
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HP-30
VP-26
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SECTION 13
SEMICONDUCTOR ELECTRODES

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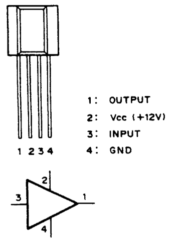
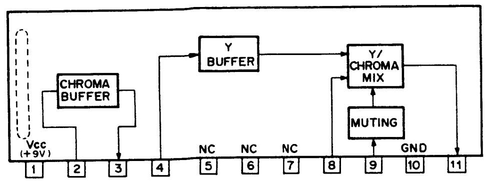
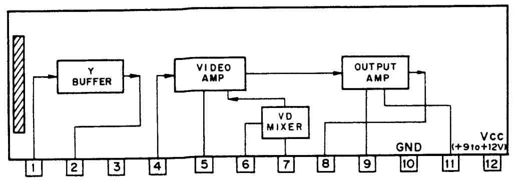
AN608P (MATSUSHITA)
WIDE BAND AMPLIFIER
— PRINTED SIDE VIEW —


1 2 3 4
1: OUTPUT
2: Vcc (+12V)
3: INPUT
4: GND
2
3
1
4

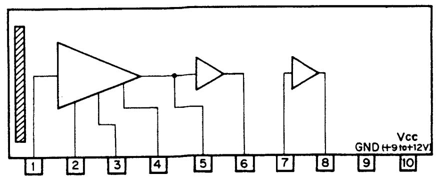
BX373A (SONY)
BX373AL (ROHM)
MIX AMP
— REAR VIEW —


CHROMA BUFFER
Y BUFFER
Y/ CHROMA MIX
MUTING
Vcc (+9V)
NC
NC
NC
GND
1
2
3
4
5
6
7
8
9
10
11

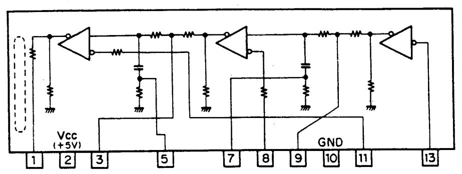
BX388 (SONY)
BX388L (ROHM)
VIDEO AMP/VD MIXER
— PRINTED SIDE —


Y BUFFER
VIDEO AMP
VD MIXER
OUTPUT AMP
GND
Vcc (+9 to +12V)
1
2
3
4
5
6
7
8
9
10
11
12

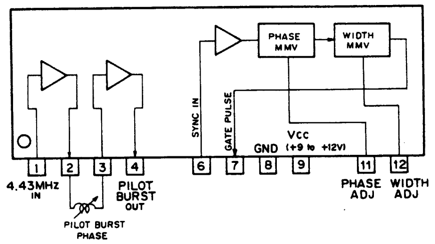
BX389 (SONY)
BX389L (ROHM)
VIDEO AMPLIFIER
— PRINTED SIDE —


GND
Vcc (+9 to +12V)
1
2
3
4
5
6
7
8
9
10

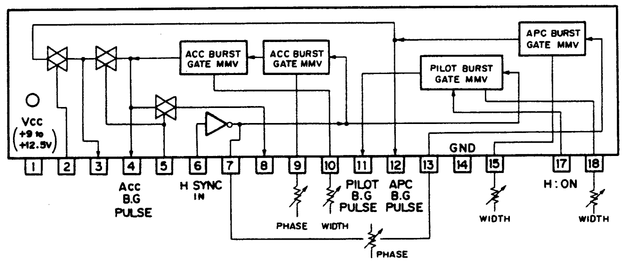
BX1140 (SONY)
BX1140L (ROHM)
HF AMP
— REAR VIEW —


Vcc (+5V)
GND
1
2
3
5
7
8
9
10
11
13

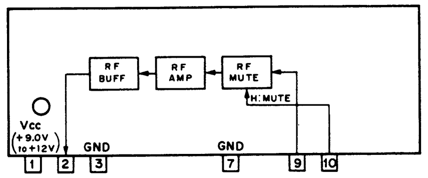
BX1262L (ROHM)
PILOT BURST INSERTER
— PRINTED SIDE VIEW —


PHASE MMV
WIDTH MMV
SYNC IN
GATE PULSE
GND
Vcc (+9 to +12V)
1
2
3
4
6
7
8
9
11
12
4.43MHz IN
PILOT BURST OUT
PILOT BURST PHASE
PHASE ADJ
WIDTH ADJ

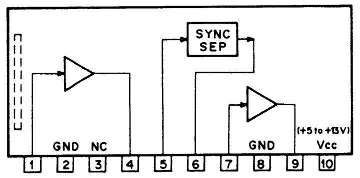
BX1264L (ROHM)
ACC/APC BURST GATE PULSE GENERATOR
— PRINTED SIDE VIEW —


ACC BURST GATE MMV
ACC BURST GATE MMV
APC BURST GATE MMV
PILOT BURST GATE MMV
Vcc (+9 to +12.5V)
GND
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
17
18
Acc B.G PULSE
H SYNC IN
PILOT B.G PULSE
APC B.G PULSE
H : ON
PHASE
WIDTH
PHASE
WIDTH
WIDTH

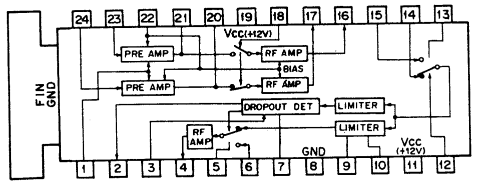
BX1265 (SONY)
BX1265L (ROHM)
VIDEO HEAD AMPLIFIER/MUTING
— PRINTED SIDE VIEW —


RF BUFF
RF AMP
RF MUTE
H: MUTE
Vcc (+9.0V to +12V)
GND
GND
1
2
3
7
9
10

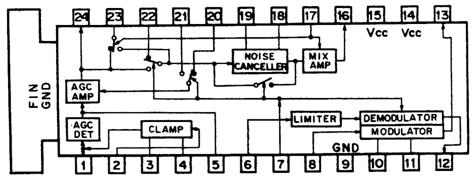
BX3915A (SONY)
SYNC SEPARATOR
— PRINTED SIDE —


SYNC SEP
GND
NC
GND
Vcc (+5 to +13V)
1
2
3
4
5
6
7
8
9
10

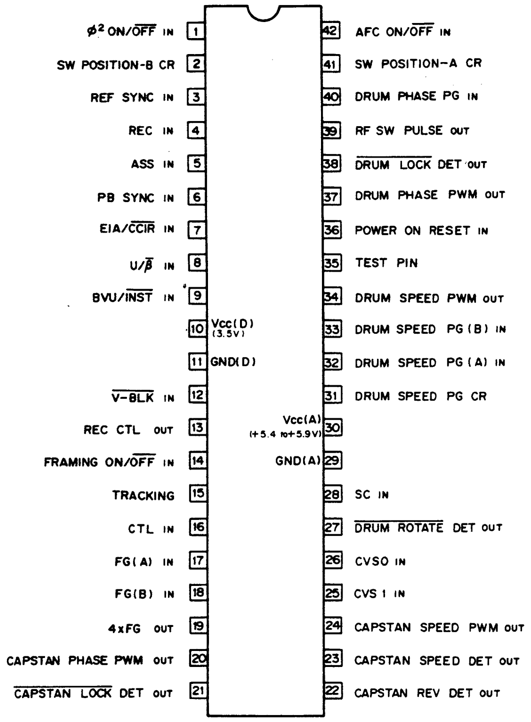
CX134A (SONY)
HEAD AMP/DROPOUT COMPENSATOR
— TOP VIEW —

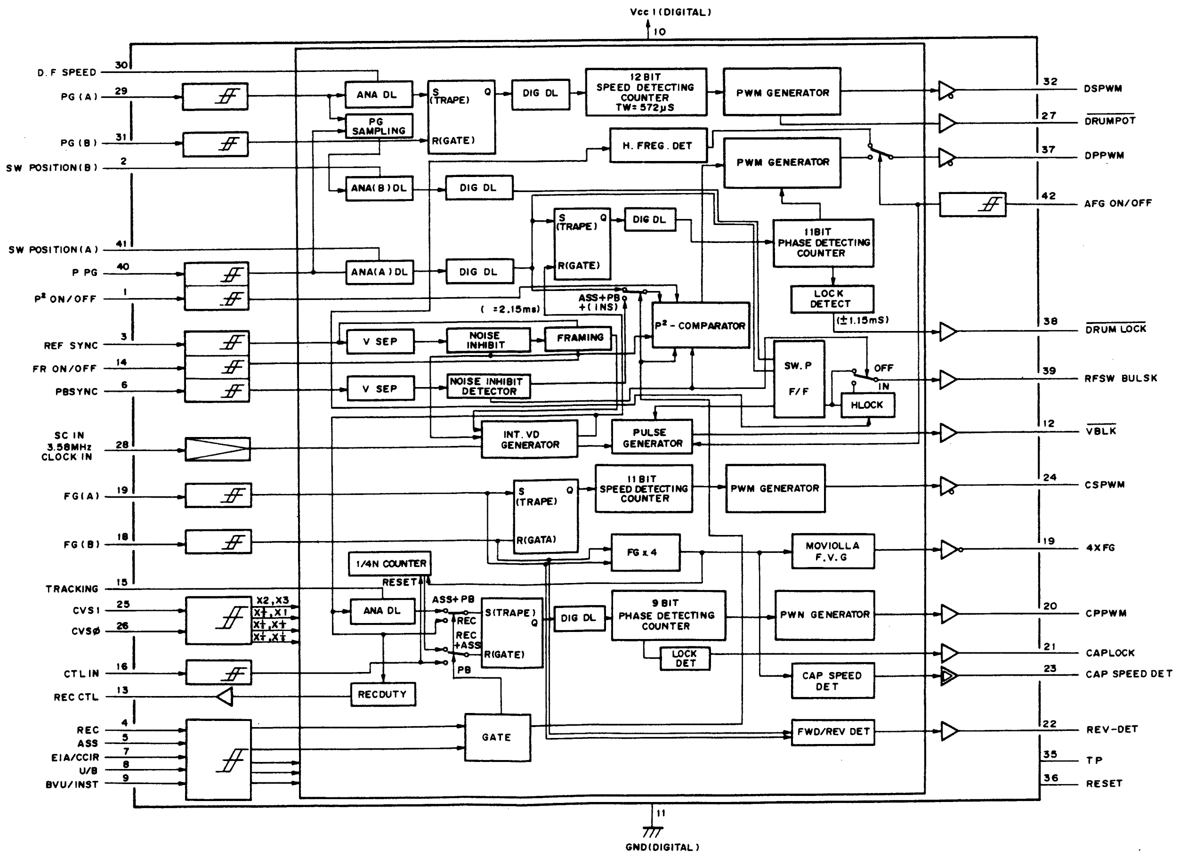

FIN GND
PRE AMP
PRE AMP
Vcc(+12V)
RF AMP
BIAS
RF AMP
DROPOUT DET
LIMITER
LIMITER
RF AMP
GND
Vcc (+12V)
24
23
22
21
20
19
18
17
16
15
14
13
1
2
3
4
5
6
7
8
9
10
11
12

CX187 (SONY)
LUMINANCE SIGNAL PROCESSER
-TOP VIEW-


FIN GND
AGC AMP
AGC DET
CLAMP
NOISE CANCELLER
MIX AMP
LIMITER
DEMODULATOR
MODULATOR
Vcc
Vcc
GND
24
23
22
21
20
19
18
17
16
15
14
13
1
2
3
4
5
6
7
8
9
10
11
12

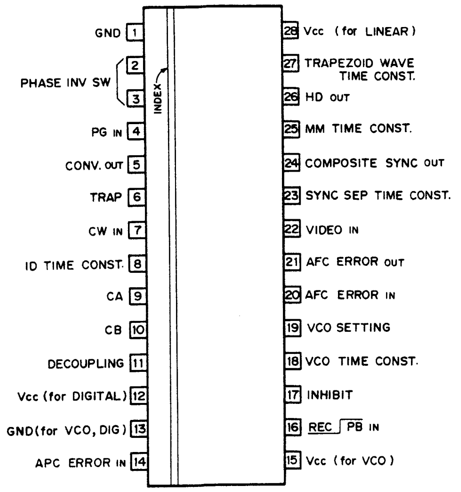
CX194B (SONY)
DRUM/CAPSTAN PWM SERVO
— TOP VIEW —

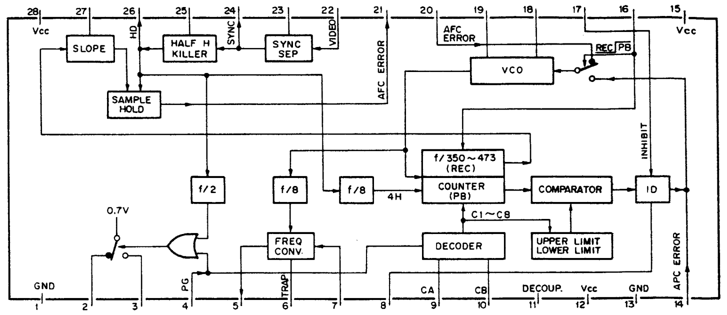

ϕ² ON/OFF IN 1
SW POSITION-B CR 2
REF SYNC IN 3
REC IN 4
ASS IN 5
PB SYNC IN 6
EIA/CCIR IN 7
U/β IN 8
BVU/INST IN 9
10 Vcc(D) (3.5V)
11 GND(D)
V-BLK IN 12
REC CTL OUT 13
FRAMING ON/OFF IN 14
TRACKING 15
CTL IN 16
FG(A) IN 17
FG(B) IN 18
4xFG OUT 19
CAPSTAN PHASE PWM OUT 20
CAPSTAN LOCK DET OUT 21
42 AFC ON/OFF IN
41 SW POSITION-A CR
40 DRUM PHASE PG IN
39 RF SW PULSE OUT
38 DRUM LOCK DET OUT
37 DRUM PHASE PWM OUT
36 POWER ON RESET IN
35 TEST PIN
34 DRUM SPEED PWM OUT
33 DRUM SPEED PG (B) IN
32 DRUM SPEED PG (A) IN
31 DRUM SPEED PG CR
Vcc(A) (+5.4 to +5.9V) 30
GND(A) 29
28 SC IN
27 DRUM ROTATE DET OUT
26 CVSO IN
25 CVS 1 IN
24 CAPSTAN SPEED PWM OUT
23 CAPSTAN SPEED DET OUT
22 CAPSTAN REV DET OUT


Vcc 1 (DIGITAL)
10
D.F SPEED 30
PG (A) 29
PG (B) 31
SW POSITION(B) 2
SW POSITION(A) 41
P PG 40
P² ON/OFF 1
REF SYNC 3
FR ON/OFF 14
PBSYNC 6
SC IN 3.58MHz CLOCK IN 28
FG(A) 19
FG(B) 18
TRACKING 15
CVS1 25
CVSØ 26
CTL IN 16
REC CTL 13
REC 4
ASS 5
EIA/CCIR 7
U/B 8
BVU/INST 9
X2, X3
X½, X1
X¼, X½
X⅛, X¼
ANA DL
PG SAMPLING
S (TRAPE) Q
R(GATE)
DIG DL
12 BIT SPEED DETECTING COUNTER TW=572μS
PWM GENERATOR
H. FREG. DET
PWM GENERATOR
ANA(B) DL
DIG DL
S (TRAPE) Q
R(GATE)
DIG DL
ANA(A) DL
DIG DL
(≒2.15ms)
ASS+PB +(INS)
11BIT PHASE DETECTING COUNTER
LOCK DETECT (±1.15mS)
P² - COMPARATOR
V SEP
NOISE INHIBIT
FRAMING
V SEP
NOISE INHIBIT DETECTOR
SW.P F/F
OFF
IN
HLOCK
INT. VD GENERATOR
PULSE GENERATOR
S (TRAPE) Q
R(GATA)
11 BIT SPEED DETECTING COUNTER
PWM GENERATOR
FG x 4
MOVIOLLA F.V.G
1/4N COUNTER
RESET
ANA DL
ASS+PB
REC
REC +ASS
PB
S(TRAPE) Q
R(GATE)
DIG DL
9 BIT PHASE DETECTING COUNTER
PWN GENERATOR
LOCK DET
CAP SPEED DET
RECDUTY
GATE
FWD/REV DET
32 DSPWM
27 DRUMPOT
37 DPPWM
42 AFG ON/OFF
38 DRUM LOCK
39 RFSW BULSK
12 VBLK
24 CSPWM
19 4XFG
20 CPPWM
21 CAPLOCK
23 CAP SPEED DET
22 REV-DET
35 TP
36 RESET
11
GND (DIGITAL)

IC IC

CX 859 (SONY)
— TOP VIEW—


GND 1
PHASE INV SW 2
3
INDEX
PG IN 4
CONV. OUT 5
TRAP 6
CW IN 7
ID TIME CONST. 8
CA 9
CB 10
DECOUPLING 11
Vcc (for DIGITAL) 12
GND(for VCO, DIG) 13
APC ERROR IN 14
28 Vcc (for LINEAR)
27 TRAPEZOID WAVE TIME CONST.
26 HD OUT
25 MM TIME CONST.
24 COMPOSITE SYNC OUT
23 SYNC SEP TIME CONST.
22 VIDEO IN
21 AFC ERROR OUT
20 AFC ERROR IN
19 VCO SETTING
18 VCO TIME CONST.
17 INHIBIT
16 REC/PB IN
15 Vcc (for VCO)


Vcc
SLOPE
HD
HALF H KILLER
SYNC
SYNC SEP
VIDEO
AFC ERROR
AFC ERROR
VCO
REC/PB
Vcc
SAMPLE HOLD
INHIBIT
f/2
f/8
f/8
4H
f/350~473 (REC)
COUNTER (PB)
COMPARATOR
ID
0.7V
FREQ CONV.
DECODER
C1~C8
UPPER LIMIT LOWER LIMIT
APC ERROR
GND
PG
TRAP
CA
CB
DECOUP.
Vcc
GND
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

DECODER TRUTH TABLE

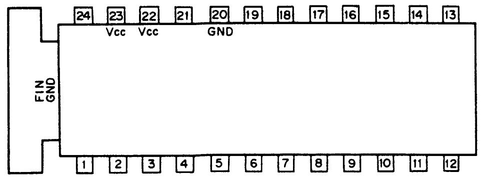
CB / CA	LOW	OPEN	HIGH
LOW	C1	C7	—
OPEN	C4	C5	C6
HIGH	—	*C2 C3	C8

* PG : L--- C2
PG : H--- C3

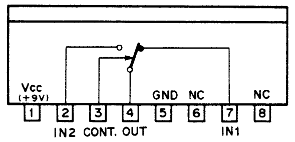
AFC/APC PRESET DATA

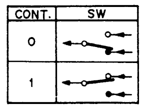
	AFC COUNT DOWN	APC ID COUNT	
		UPPER LIM.	LOWER LIM.
C1	f/473	105	95
C2	f/351	129	119
C3	f/353	137	127
C4	f/351	118	104
C5	f/351	131	117
C6	f/351	144	130
C7	f/350	136	104
C8	——	125	115

CX872 (SONY)
— TOP VIEW —

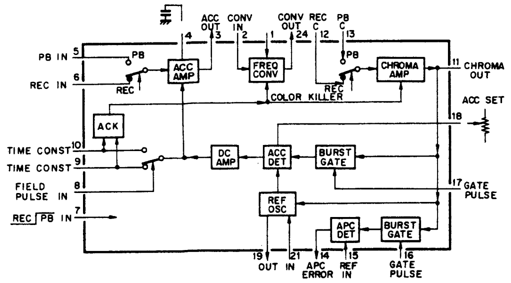

24
23
22
21
20
19
18
17
16
15
14
13
Vcc
Vcc
GND
FIN GND
1
2
3
4
5
6
7
8
9
10
11
12

CX20061 (SONY)
ANALOG SWITCH
— SIDE VIEW —

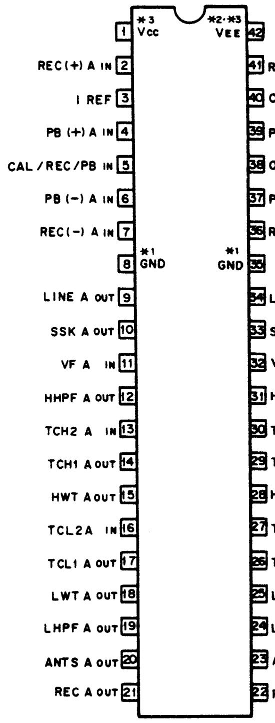

Vcc (+9V)
GND
NC
NC
1
2
3
4
5
6
7
8
IN2
CONT.
OUT
IN1

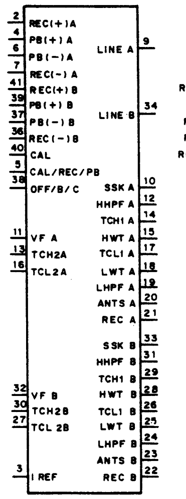


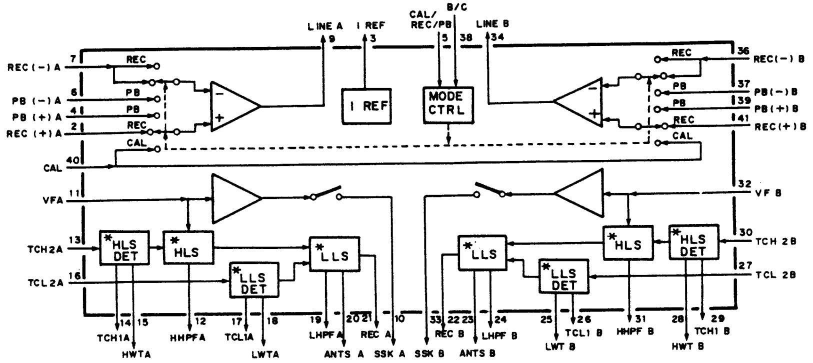
0 ; LOW LEVEL
1 ; HIGH LEVEL


ACC OUT
CONV IN
CONV OUT
REC C
PB C
4
3
2
1
24
12
13
PB IN 5
REC IN 6
PB
REC
ACC AMP
FREQ CONV
PB
REC
CHROMA AMP
11 CHROMA OUT
COLOR KILLER
ACC SET
18
ACK
TIME CONST 10
TIME CONST 9
FIELD PULSE IN 8
REC/PB IN 7
DC AMP
ACC DET
BURST GATE
17 GATE PULSE
REF OSC
APC DET
BURST GATE
19 OUT
21 IN
14 APC ERROR
15 REF IN
16 GATE PULSE

CX20188 (SONY)
DOLBY B TYPE AND C TYPE, NOISE REDUCTION SYSTEM
— TOP VIEW —


*3 Vcc 1
*2·*3 VEE 42
REC(+) A IN 2
I REF 3
PB (+) A IN 4
CAL / REC / PB IN 5
PB (−) A IN 6
REC(−) A IN 7
*1 GND 8
LINE A OUT 9
SSK A OUT 10
VF A IN 11
HHPF A OUT 12
TCH2 A IN 13
TCH1 A OUT 14
HWT A OUT 15
TCL2A IN 16
TCL1 A OUT 17
LWT A OUT 18
LHPF A OUT 19
ANTS A OUT 20
REC A OUT 21
41 REC(+) B IN
40 CAL IN
39 PB(+) B IN
38 OFF/B/C IN
37 PB(−) B IN
36 REC(−) B IN
*1 GND 35
34 LINE B OUT
33 SSK B OUT
32 VF B IN
31 HHPF B OUT
30 TCH2 B IN
29 TCH1 B OUT
28 HWT B OUT
27 TCL2 B IN
26 TCL1 B OUT
25 LWT B OUT
24 LHPF B OUT
23 ANTS B OUT
22 REC B OUT

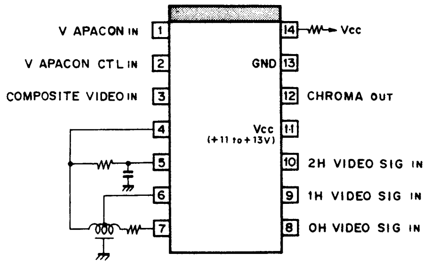

2 REC(+) A
4 PB(+) A
6 PB(−) A
7 REC(−) A
41 REC(+) B
39 PB(+) B
37 PB(−) B
36 REC(−) B
40 CAL
5 CAL/REC/PB
38 OFF/B/C
11 VF A
13 TCH2A
16 TCL2A
32 VF B
30 TCH2B
27 TCL 2B
3 I REF
LINE A 9
LINE B 34
SSK A 10
HHPF A 12
TCH1 A 14
HWT A 15
TCL1 A 17
LWT A 18
LHPF A 19
ANTS A 20
REC A 21
SSK B 33
HHPF B 31
TCH1 B 29
HWT B 28
TCL1 B 26
LWT B 25
LHPF B 24
ANTS B 23
REC B 22

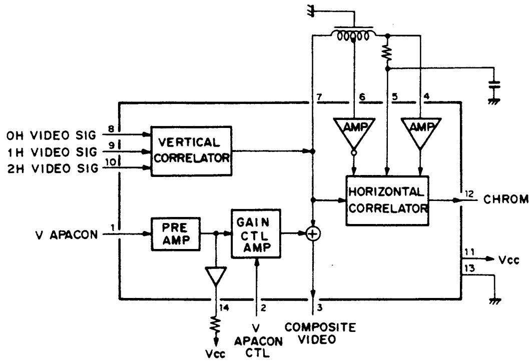

OFF/ B/C
CAL/ REC/PB
LINE A
I REF
LINE B
9
3
5
38
34
REC(−) A 7
PB (−) A 6
PB (+) A 4
REC (+) A 2
CAL 40
VFA 11
TCH2A 13
TCL2A 16
REC
PB
PB
REC
CAL
I REF
MODE CTRL
36 REC(−) B
37 PB(−) B
39 PB(+) B
41 REC(+) B
32 VF B
30 TCH 2B
27 TCL 2B
*HLS DET
*HLS
*LLS DET
*LLS
14 TCH1A
15 HWTA
12 HHPFA
17 TCL1A
18 LWTA
19 LHPF A
20 ANTS A
21 REC A
10 SSK A
33 SSK B
22 REC B
23 ANTS B
24 LHPF B
25 LWT B
26 TCL1 B
31 HHPF B
28 HWT B
29 TCH1 B

ANTS	; ANTI SATURATION
CAL	; CALIBRATION
CAL/REC/PB	; CALIBRATION/REC/ PB SELECT
HHPF	; *HLS HIGH PASS FILTER
HWT	; *HLS WAITING
I REF	; REFERENCE SOURCE CURRENT
LHPF	; *LLS HIGH PASS FILTER
LWT	; *LLS WAITING
OFF/B/C	; DOLBY NR OFF/B-TYPE/C-TYPE SELECT
SSK	; SPECTRAL SKEWING SWITCH
TCH	; *HLS DETECTOR TIME CONSTANT
TCL	; *LLS DETECTOR TIME CONSTANT
VF	; ENCODE INPUT
*HLS	; HIGH LEVEL STAGE
*LLS	; LOW LEVEL STAGE

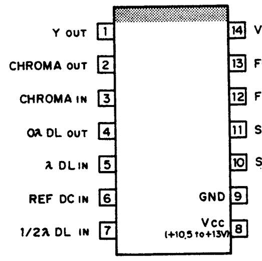
*1 ; ONE POWER → Vcc/2. TWO POWER → GND
*2 ; ONE POWER → GND. TWO POWER → VEE
*3 ; Vcc − VEE : +8 to +21V

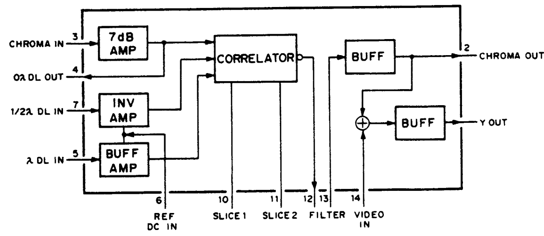
CX22013 (SONY)
DYNAMIC COMB FILTER
— TOP VIEW —


V APACON IN 1
V APACON CTL IN 2
COMPOSITE VIDEO IN 3
4
5
6
7
14 Vcc
GND 13
12 CHROMA OUT
Vcc (+11 to +13V) 11
10 2H VIDEO SIG IN
9 1H VIDEO SIG IN
8 OH VIDEO SIG IN

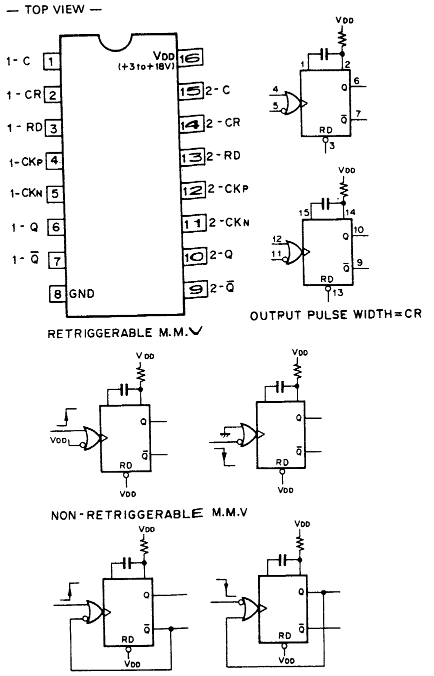

7
6
5
4
OH VIDEO SIG 8
1H VIDEO SIG 9
2H VIDEO SIG 10
VERTICAL CORRELATOR
AMP
AMP
HORIZONTAL CORRELATOR
12 CHROMA
V APACON 1
PRE AMP
GAIN CTL AMP
11 Vcc
13
14
2
3
Vcc
V APACON CTL
COMPOSITE VIDEO

CXA1020P (SONY)
CHROMA CROSS-COLOR NOISE REDUCER/EDGE COMPENSATOR
— TOP VIEW —

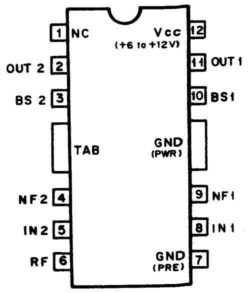

Y OUT 1
CHROMA OUT 2
CHROMA IN 3
0λ DL OUT 4
λ DL IN 5
REF DC IN 6
1/2λ DL IN 7
14 VIDEO IN
13 FILTER
12 FILTER
11 SLICE 2
10 SLICE 1
GND 9
Vcc (+10.5 to +13V) 8


CHROMA IN 3
0λ DL OUT 4
1/2λ DL IN 7
λ DL IN 5
7dB AMP
INV AMP
BUFF AMP
CORRELATOR
BUFF
BUFF
2 CHROMA OUT
Y OUT
6 REF DC IN
10 SLICE 1
11 SLICE 2
12 13 FILTER
14 VIDEO IN

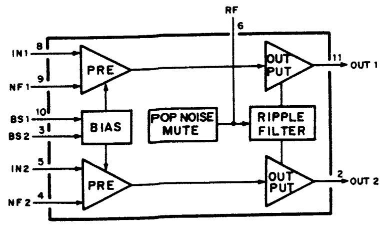
HD14538BP (HITACHI)
C-MOS DUAL RETRIGGERABLE/NON-RETRIGGERABLE MONOSTABLE MULTIVIBRATOR
— TOP VIEW —


1-C 1
1-CR 2
1-RD 3
1-CKP 4
1-CKN 5
1-Q 6
1-Q̄ 7
8 GND
VDD (+3 to +18V) 16
15 2-C
14 2-CR
13 2-RD
12 2-CKP
11 2-CKN
10 2-Q
9 2-Q̄
VDD
RD
RETRIGGERABLE M.M.V
OUTPUT PULSE WIDTH=CR
NON-RETRIGGERABLE M.M.V

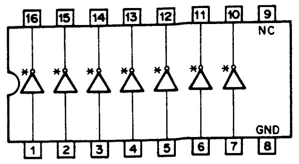
LA4550 (SANYO)
2CH AF POWER AMP
— TOP VIEW —


1 NC
OUT 2 2
BS 2 3
TAB
NF2 4
IN2 5
RF 6
Vcc (+6 to +12V) 12
11 OUT 1
10 BS1
GND (PWR)
9 NF1
8 IN1
GND (PRE) 7

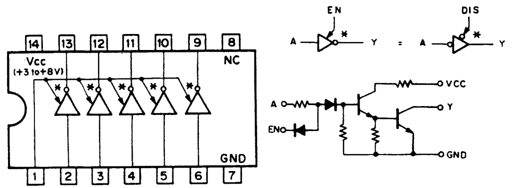
BS1,BS2 ;BOOTSTRAP CAPACITOR
IN1,IN2 ;INPUTS
NF1,NF2 ;NEGATIVE FEEDBACK CONTROL
OUT1,OUT2;OUTPUTS
RF ;RIPPLE FILTER


IN1
NF1
BS1
BS2
IN2
NF2
RF
PRE
BIAS
POP NOISE MUTE
RIPPLE FILTER
OUT PUT
OUT 1
OUT 2

M54517P (MITSUBISHI)
INVERTER WITH OPEN-COLLECTOR
(DARLINGTON-CONNECTED TRANSISTOR ARRAY)
— TOP VIEW —


16 15 14 13 12 11 10 9
NC
GND
1 2 3 4 5 6 7 8

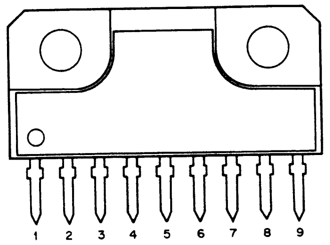
M54529AP (MITSUBISHI)
TRANSISTOR ARRAY
— TOP VIEW —

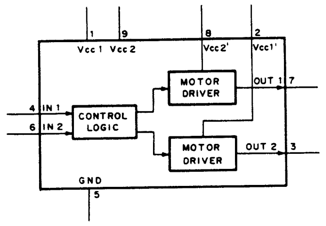

14 13 12 11 10 9 8
Vcc (+3 to +8V)
NC
GND
1 2 3 4 5 6 7
ENABLE
EN
DIS
A
Y
VCC
GND

A	EN	Y
0	1	1
1	1	0
X	0	1

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
* ; OPEN COLLECTOR

M54543L (MITSUBISHI)
BI-DIRECTIONAL MOTOR DRIVER
— SIDE VIEW —

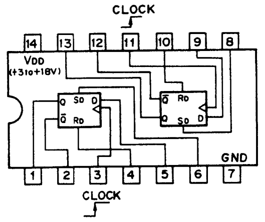



Vcc1 Vcc2
Vcc2'
Vcc1'
IN 1 4
IN 2 6
CONTROL LOGIC
MOTOR DRIVER
MOTOR DRIVER
OUT 1 7
OUT 2 3
GND 5

IN 1	IN 2	OUT 1	OUT 2	MODE
0	0	Z	Z	NO OPERATION
1	0	1	0	ROTATION
0	1	0	1	REVERSE ROTATION
1	1	0	0	BRAKE

0 : LOW LEVEL
1 : HIGH LEVEL
Z : HIGH IMPEDANCE

MB84013B (FUJITSU)
C-MOS D-TYPE FLIP-FLOP WITH DIRECT SET/RESET
— TOP VIEW —


CLOCK
14 13 12 11 10 9 8
VDD (+3 to +18V)
GND
1 2 3 4 5 6 7
CLOCK

DIRECT R-S FLIP FLOP

SD	RD	Q	Q̄
0	0	Qn	Q̄n
0	1	0	1
1	0	1	0
1	1	1	1

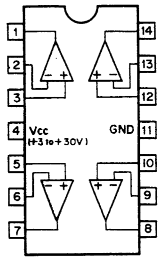
0:LOW LEVEL
1:HIGH LEVEL

D-TYPE FLIP FLOP

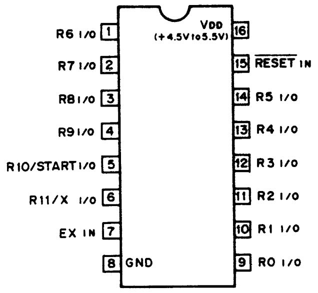
CKn	CKn+1
D	Q
0	0
1	1

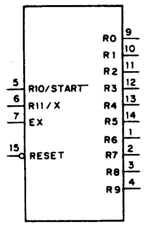
CLOCK CK;
CKn;BEFORE CLOCK
CKn+1;AFTER CLOCK

MB3614 (FUJITSU)
QUAD. OP AMPLIFIER
— TOP VIEW —

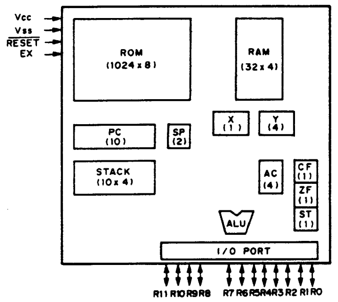

1 2 3 4 5 6 7
14 13 12 11 10 9 8
Vcc (+3 to +30V)
GND

MB88201-173N (FUJITSU)
C-MOS 4 BIT MICROCOMPUTER
— TOP VIEW —

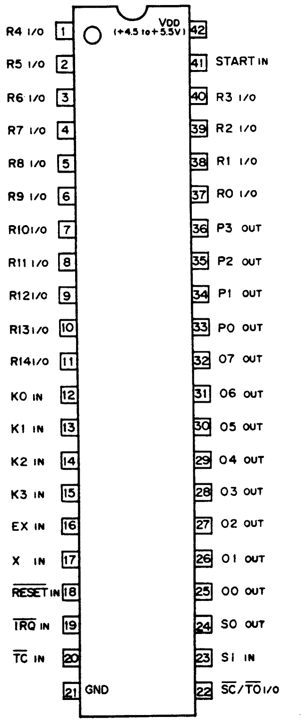

R6 I/O 1
R7 I/O 2
R8 I/O 3
R9 I/O 4
R10/START I/O 5
R11/X I/O 6
EX IN 7
8 GND
VDD (+4.5V to 5.5V) 16
15 RESET IN
14 R5 I/O
13 R4 I/O
12 R3 I/O
11 R2 I/O
10 R1 I/O
9 R0 I/O

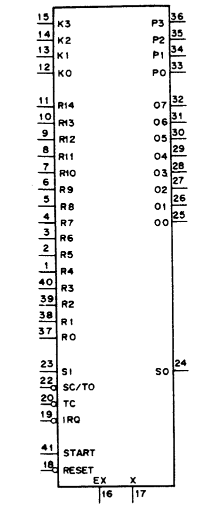

5 R10/START
6 R11/X
7 EX
15 RESET
R0 9
R1 10
R2 11
R3 12
R4 13
R5 14
R6 1
R7 2
R8 3
R9 4

EX ; EXTERNAL X'TAL IN
R0–R11 ; I/O PORT(R) IN/OUT
RESET ; RESET IN
START ; STANDBY RELEASE IN
R11/X ; EXT CLOCK IN/INT CLOCK OUT

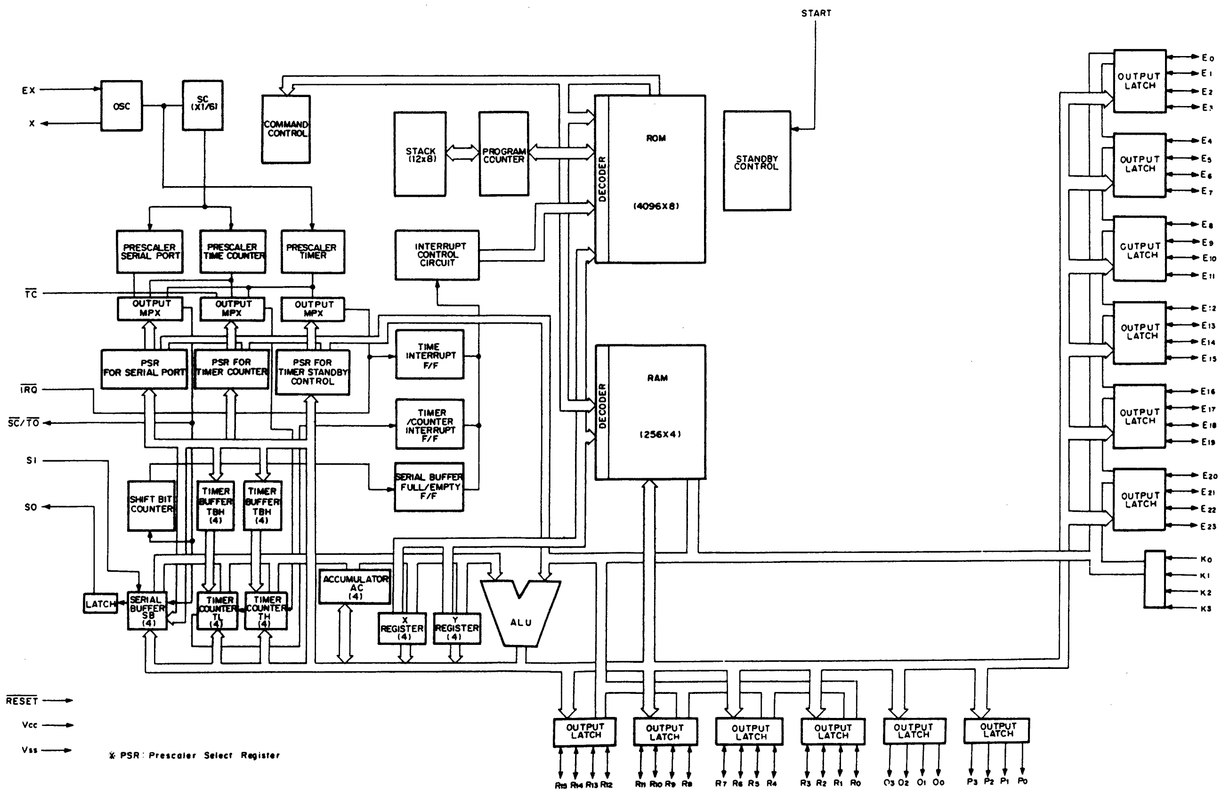

Vcc
Vss
RESET
EX
ROM (1024×8)
RAM (32×4)
PC (10)
SP (2)
X (1)
Y (4)
STACK (10×4)
AC (4)
CF (1)
ZF (1)
ST (1)
ALU
I/O PORT
R11 R10 R9 R8 R7 R6 R5 R4 R3 R2 R1 R0

MB88505P (FUJITSU)
C-MOS 4-BIT ONE-CHIP MICROCOMPUTER
— TOP VIEW —

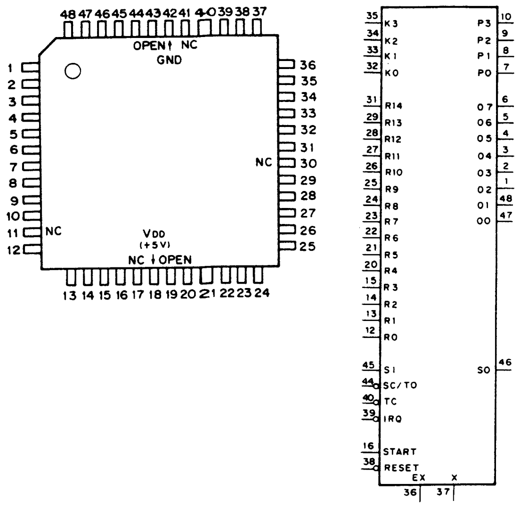

R4 I/O 1
R5 I/O 2
R6 I/O 3
R7 I/O 4
R8 I/O 5
R9 I/O 6
R10 I/O 7
R11 I/O 8
R12 I/O 9
R13 I/O 10
R14 I/O 11
K0 IN 12
K1 IN 13
K2 IN 14
K3 IN 15
EX IN 16
X IN 17
RESET IN 18
IRQ IN 19
TC IN 20
21 GND
VDD (+4.5 to +5.5V) 42
41 START IN
40 R3 I/O
39 R2 I/O
38 R1 I/O
37 R0 I/O
36 P3 OUT
35 P2 OUT
34 P1 OUT
33 P0 OUT
32 O7 OUT
31 O6 OUT
30 O5 OUT
29 O4 OUT
28 O3 OUT
27 O2 OUT
26 O1 OUT
25 O0 OUT
24 SO OUT
23 SI IN
22 SC/TO I/O


15 K3
14 K2
13 K1
12 K0
11 R14
10 R13
9 R12
8 R11
7 R10
6 R9
5 R8
4 R7
3 R6
2 R5
1 R4
40 R3
39 R2
38 R1
37 R0
23 SI
22 SC/TO
20 TC
19 IRQ
41 START
18 RESET
EX 16
X 17
P3 36
P2 35
P1 34
P0 33
O7 32
O6 31
O5 30
O4 29
O3 28
O2 27
O1 26
O0 25
SO 24

EX ; EXTERNAL CLOCK IN
IRQ ; INTERRUPT REQUEST IN
K0-K3 ; 4-BIT PARALLEL IN
O0-O7 ; 4-BIT PARALLEL OUT
P0-P3 ; 4-BIT PARALLEL OUT
R0-R14 ; DATA IN/OUT
RESET ; RESET IN
SC/TO ; SHIFT CLOCK IN / INT TIMING OUT
SI ; SERIAL DATA IN
SO ; SERIAL DATA OUT
START ; STANDBY OFF IN
TC ; EXTERNAL CLOCK IN FOR COUNTER
X ; CLOCK OUT

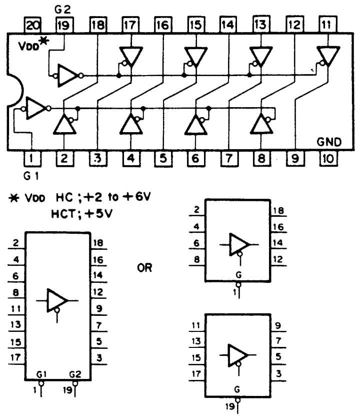

START
EX
X
OSC
SC (X1/8)
COMMAND CONTROL
STACK (12×8)
PROGRAM COUNTER
DECODER
ROM (4096×8)
STANDBY CONTROL
TC
PRESCALER SERIAL PORT
PRESCALER TIME COUNTER
PRESCALER TIMER
INTERRUPT CONTROL CIRCUIT
OUTPUT MPX
PSR FOR SERIAL PORT
PSR FOR TIMER COUNTER
PSR FOR TIMER STANDBY CONTROL
TIME INTERRUPT F/F
TIMER /COUNTER INTERRUPT F/F
SERIAL BUFFER FULL/EMPTY F/F
RAM (256×4)
IRQ
SC/TO
SI
SO
SHIFT BIT COUNTER
TIMER BUFFER TBH (4)
TIMER BUFFER TBH (4)
LATCH
SERIAL BUFFER SB (4)
TIMER COUNTER TL (4)
TIMER COUNTER TH (4)
ACCUMULATOR AC (4)
X REGISTER (4)
Y REGISTER (4)
ALU
OUTPUT LATCH
E0 E1 E2 E3 E4 E5 E6 E7 E8 E9 E10 E11 E12 E13 E14 E15 E16 E17 E18 E19 E20 E21 E22 E23
K0 K1 K2 K3
R15 R14 R13 R12 R11 R10 R9 R8 R7 R6 R5 R4 R3 R2 R1 R0 O3 O2 O1 O0 P3 P2 P1 P0
RESET
Vcc
Vss
※ PSR : Prescaler Select Register

MB88505PF (FUJITSU) FLAT PACKAGE
C-MOS 4-BIT ONE-CHIP MICROCOMPUTER
— TOP VIEW —

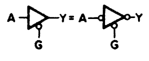

48 47 46 45 44 43 42 41 40 39 38 37
OPEN NC
GND
1
2
3
4
5
6
7
8
9
10
11
12
NC
VDD (+5V)
NC OPEN
NC
36
35
34
33
32
31
30
29
28
27
26
25
13 14 15 16 17 18 19 20 21 22 23 24
35 K3
34 K2
33 K1
32 K0
31 R14
29 R13
28 R12
27 R11
26 R10
25 R9
24 R8
23 R7
22 R6
21 R5
20 R4
15 R3
14 R2
13 R1
12 R0
45 SI
44 SC/TO
40 TC
39 IRQ
16 START
38 RESET
EX X
36 37
P3 10
P2 9
P1 8
P0 7
07 6
06 5
05 4
04 3
03 2
02 1
01 48
00 47
SO 46

EX ; EXTERNAL CLOCK IN
$\overline{\text{IRQ}}$; INTERRUPT REQUEST IN
KO-K3 ; 4-BIT PARALLEL IN
OO-O7 ; 4-BIT PARALLEL OUT
PO-P3 ; 4-BIT PARALLEL OUT
RO-R14 ; DATA IN/OUT
$\overline{\text{RESET}}$; RESET IN
$\overline{\text{SC}}/\overline{\text{TO}}$; SHIFT CLOCK IN/INT TIMING OUT
SI ; SERIAL DATA IN
SO ; SERIAL DATA OUT
START ; STANDBY OFF IN
$\overline{\text{TC}}$; EXTERNAL CLOCK IN FOR COUNTER
X ; CLOCK OUT

MC74HC244N (MOTOROLA)
SN74HC244N (TI)
TC74HC244P (TOSHIBA)
C-MOS BUS BUFFER WITH 3-STATE OUTPUT
— TOP VIEW —


G2
20 19 18 17 16 15 14 13 12 11
VDD*
GND
1 2 3 4 5 6 7 8 9 10
G1
2 4 6 8 11 13 15 17
18 16 14 12 9 7 5 3
G1 G2
1 19
OR
2 4 6 8
18 16 14 12
G
1
11 13 15 17
9 7 5 3
G
19

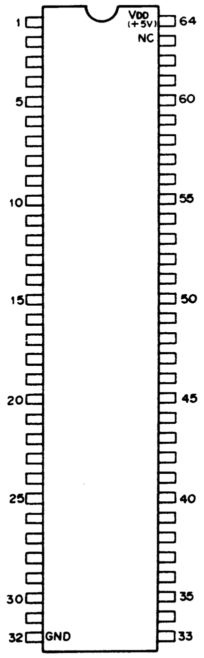
* VDD HC ;+2 to +6V
HCT;+5V



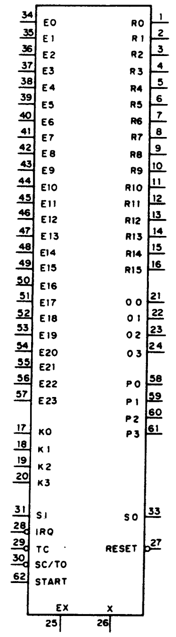
G	A	Y
0	0	0
0	1	1
1	X	HI-Z

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z;HIGH IMPEDANCE

MB88525P (FUJITSU)
C-MOS 4-BIT ONE-CHIP MICROCOMPUTER
— TOP VIEW —

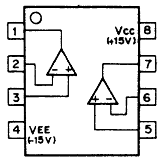

1
VDD (+5V)
NC
64
5
60
10
55
15
50
20
45
25
40
30
35
32
GND
33

PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL
1	○	○	R0	33		○	S0
2	○	○	R1	34	○	○	E0
3	○	○	R2	35	○	○	E1
4	○	○	R3	36	○	○	E2
5	○	○	R4	37	○	○	E3
6	○	○	R5	38	○	○	E4
7	○	○	R6	39	○	○	E5
8	○	○	R7	40	○	○	E6
9	○	○	R8	41	○	○	E7
10	○	○	R9	42	○	○	E8
11	○	○	R10	43	○	○	E9
12	○	○	R11	44	○	○	E10
13	○	○	R12	45	○	○	E11
14	○	○	R13	46	○	○	E12
15	○	○	R14	47	○	○	E13
16	○	○	R15	48	○	○	E14
17	○		K0	49	○	○	E15
18	○		K1	50	○	○	E16
19	○		K2	51	○	○	E17
20	○		K3	52	○	○	E18
21		○	00	53	○	○	E19
22		○	01	54	○	○	E20
23		○	02	55	○	○	E21
24		○	03	56	○	○	E22
25	○		EX	57	○	○	E23
26		○	X	58		○	P0
27	○	○	$\overline{\text{RESET}}$	59		○	P1
28	○		$\overline{\text{IRQ}}$	60		○	P2
29	○		$\overline{\text{TC}}$	61		○	P3
30	○	○	$\overline{\text{SC}}/\overline{\text{TO}}$	62	○		START
31	○		SI	63	—	—	——
32			GND	64			VDD

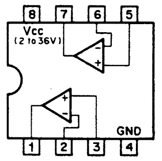

34 E0
35 E1
36 E2
37 E3
38 E4
39 E5
40 E6
41 E7
42 E8
43 E9
44 E10
45 E11
46 E12
47 E13
48 E14
49 E15
50 E16
51 E17
52 E18
53 E19
54 E20
55 E21
56 E22
57 E23
17 K0
18 K1
19 K2
20 K3
31 SI
28 IRQ
29 TC
30 SC/TO
62 START
EX X
25 26
R0 1
R1 2
R2 3
R3 4
R4 5
R5 6
R6 7
R7 8
R8 9
R9 10
R10 11
R11 12
R12 13
R13 14
R14 15
R15 16
O0 21
O1 22
O2 23
O3 24
P0 58
P1 59
P2 60
P3 61
SO 33
RESET 27

E0-E23* ; I/O PORT (E) IN/OUT
EX ; EXTERNAL CLOCK IN
$\overline{\text{IRQ}}$; EXTERNAL INTERRUPT REQUEST IN
KO-K3 ; INPUT PORT(K) IN
OO-O3 ; OUTPUT PORT(O) OUT
PO-P3 ; OUTPUT PORT(P) OUT
RO-R15 ; I/O PORT (R) IN/OUT
$\overline{\text{RESET}}$; RESET IN
$\overline{\text{SC}}/\overline{\text{TO}}$; SHIFT CLOCK IN/TIMING OUT
SI ; SERIAL DATA IN
START ; STANDBY RELEASE IN
$\overline{\text{SO}}$; SERAL DATA OUT
$\overline{\text{TC}}$; EXTERNAL CLOCK IN
X ; CLOCK OUT

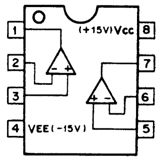
NJM2043D-D (JRC)
OPERATIONAL AMPLIFIER
— TOP VIEW —


1
2
3
4
VEE (-15V)
Vcc (+15V)
8
7
6
5

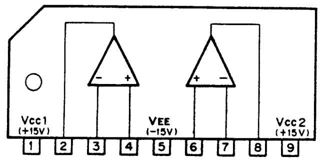
NJM2903D (JRC)
uPC393C (NEC)
VOLTAGE COMPARATOR
— TOP VIEW —


8 7 6 5
Vcc (2 to 36V)
GND
1 2 3 4

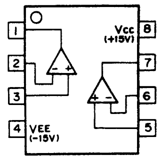
NJM4558D (JRC)
NJM4558D-D (JRC)
uPC4558C (NEC)
OPERATIONAL AMPLIFIER
— TOP VIEW —


1
2
3
4
VEE(-15V)
(+15V)Vcc
8
7
6
5

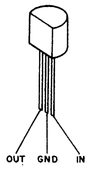
NJM4558S (JRC)
HIGH PERFORMANCE DUAL OPERATIONAL AMPLIFIER
— SIDE VIEW —


Vcc1 (+15V)
VEE (-15V)
Vcc2 (+15V)
1 2 3 4 5 6 7 8 9

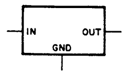
NJM4562D-D (JRC)
OPERATIONAL AMPLIFIER
— TOP VIEW —


1
2
3
4
VEE (-15V)
Vcc (+15V)
8
7
6
5

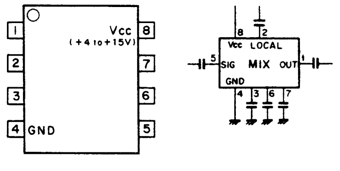
NJM78L ? ?A (NEC)
uPC78L ? ?J(NEC)
POSITIVE VOLTAGE REGULATOR (100mA)



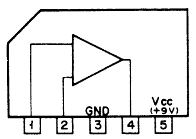
+5V NJM78L05A uA78L05ACL uA78L05AWV uPC78L05J AN78L05



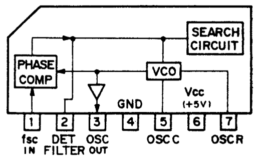
SN16913P (TI)
— TOP VIEW —


1
2
3
4
GND
Vcc (+4 to +15V)
8
7
6
5
8
2
Vcc LOCAL
SIG MIX OUT
GND
1
3
4
5
6
7

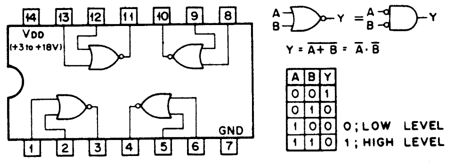
TA7060AP (TOSHIBA)
LINEAR AMP
— SIDE VIEW —


GND
Vcc (+9V)
1 2 3 4 5

TA7374P (TOSHIBA)
THREE TIMES OSCILLATOR
— SIDE VIEW —


SEARCH CIRCUIT
PHASE COMP
VCO
GND
Vcc (+5V)
1 2 3 4 5 6 7
fsc IN
DET FILTER
OSC OUT
OSCC
OSCR

TC4001BP (TOSHIBA)
TC4001UBP (TOSHIBA)
C-MOS 2-INPUT NOR GATE
— TOP VIEW —

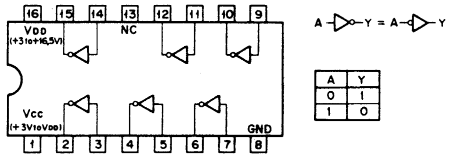

14 13 12 11 10 9 8
VDD (+3 to +18V)
GND
1 2 3 4 5 6 7
A
B
Y
A
B
Y

$Y = \overline{A+B} = \overline{A}\cdot\overline{B}$

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

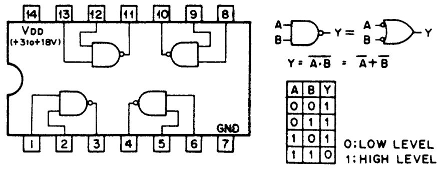
0 ; LOW LEVEL
1 ; HIGH LEVEL

TC4009UBP (TOSHIBA)
C-MOS INVERTING TYPE BUFFER/CONVERTER (TO TTL LEVEL)
— TOP VIEW —


16 15 14 13 12 11 10 9
VDD (+3 to +16.5V)
NC
Vcc (+3V to VDD)
GND
1 2 3 4 5 6 7 8
A
Y = A
Y

A	Y
0	1
1	0

TC4011BP (TOSHIBA)
C-MOS 2-INPUT NAND GATE
— TOP VIEW —

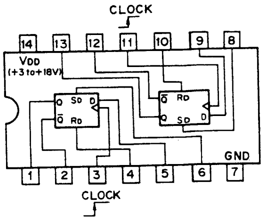

14 13 12 11 10 9 8
VDD (+3 to +18V)
GND
1 2 3 4 5 6 7
A
B
Y =
A
B
Y

$Y = \overline{A\cdot B} = \overline{A}+\overline{B}$

A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0:LOW LEVEL
1:HIGH LEVEL

TC4013BP (TOSHIBA)
C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET
— TOP VIEW —


CLOCK
14
13
12
11
10
9
8
VDD
(+3 to+18V)
Q
SD
D
$\bar{Q}$
RD
$\bar{Q}$
RD
Q
SD
D
GND
1
2
3
4
5
6
7
CLOCK

DIRECT R-S FLIP FLOP

SD	RD	Q	$\bar{Q}$
0	0	Qn	$\bar{Q}$n
0	1	0	1
1	0	1	0
1	1	0	1

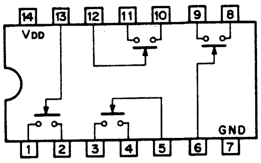
D-TYPE FLIP FLOP

CKn	CKn+1
D	Q
0	0
1	1

CLOCK CK↑
CKn; BEFORE CLOCK
CKn+1; AFTER CLOCK

0; LOW LEVEL
1; HIGH LEVEL

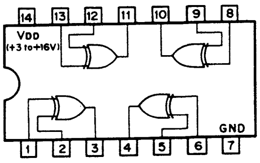
TC4016BPHB (TOSHIBA)
C-MOS BILATERAL SWITCH
— TOP VIEW —


14
13
12
11
10
9
8
VDD
GND
1
2
3
4
5
6
7

CONT IN	SW
0	OFF
1	ON

0; LOW LEVEL
1; HIGH LEVEL

TC4030BP (TOSHIBA)
TC4030BPHB (TOSHIBA)
C-MOS EXCLUSIVE OR GATE
— TOP VIEW —

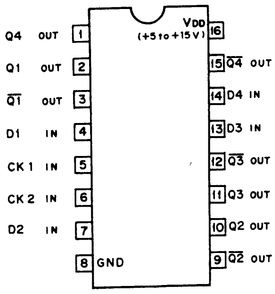

14
13
12
11
10
9
8
VDD
(+3 to+16V)
GND
1
2
3
4
5
6
7

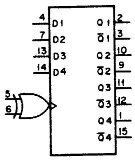
$Y=\bar{A}\cdot B+A\cdot\bar{B}$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

0: LOW LEVEL
1: HIGH LEVEL

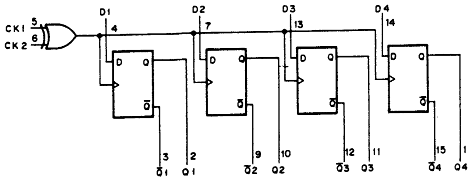
TC4042BP (TOSHIBA)
C-MOS D-TYPE LATCH
— TOP VIEW —


Q4 OUT
1
Q1 OUT
2
$\bar{Q1}$ OUT
3
D1 IN
4
CK1 IN
5
CK2 IN
6
D2 IN
7
8
GND
VDD
(+5 to +15V)
16
15
$\bar{Q4}$ OUT
14
D4 IN
13
D3 IN
12
$\bar{Q3}$ OUT
11
Q3 OUT
10
Q2 OUT
9
$\bar{Q2}$ OUT

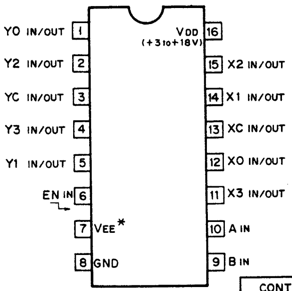

4
D1
7
D2
13
D3
14
D4
5
6
Q1
2
$\bar{Q}$1
3
Q2
10
$\bar{Q}$2
9
Q3
11
$\bar{Q}$3
12
Q4
1
$\bar{Q}$4
15

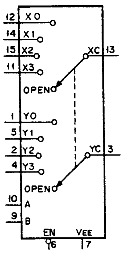
FUNCTION TABLE

CK1	CK2	Q / $\bar{Q}$
0	0	PASS DATA
0	1	LATCH DATA
1	0	LATCH DATA
1	1	PASS DATA


CK1
CK2
5
6
D1
4
D2
7
D3
13
D4
14
D
Q
$\bar{Q}$
3
2
$\bar{Q}$1
Q1
9
10
$\bar{Q}$2
Q2
12
11
$\bar{Q}$3
Q3
15
1
$\bar{Q}$4
Q4

TC4052BP (TOSHIBA)
TC4052BPHB (TOSHIBA)
C-MOS 4-CHANNEL MULTIPLEXER/DEMULTIPLEXER
— TOP VIEW —


Y0 IN/OUT
1
Y2 IN/OUT
2
YC IN/OUT
3
Y3 IN/OUT
4
Y1 IN/OUT
5
EN IN
6
7
VEE*
8
GND
VDD
(+3 to+18V)
16
15
X2 IN/OUT
14
X1 IN/OUT
13
XC IN/OUT
12
X0 IN/OUT
11
X3 IN/OUT
10
A IN
9
B IN

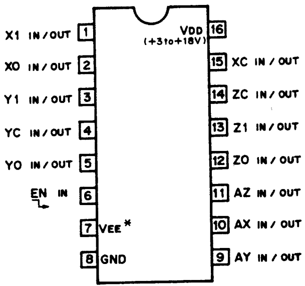

12
X0
14
X1
15
X2
11
X3
XC
13
OPEN
1
Y0
5
Y1
2
Y2
4
Y3
YC
3
OPEN
10
A
9
B
EN
VEE
6
7

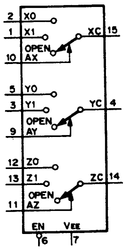
VEE*; VDD−VEE = +3 to +18V

CONTROL INPUTS			"ON" CHANNEL
EN	B	A	
0	0	0	0
0	0	1	1
0	1	0	2
0	1	1	3
1	X	X	OPEN

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE.

TC4053BP (TOSHIBA)
TC4053BPHB (TOSHIBA)
uPD4053BC (NEC)
C-MOS 2-CHANNEL MULTIPLEXER/DEMULTIPLEXER
— TOP VIEW —


X1 IN/OUT
1
X0 IN/OUT
2
Y1 IN/OUT
3
YC IN/OUT
4
Y0 IN/OUT
5
EN IN
6
7
VEE*
8
GND
VDD
(+3 to+18V)
16
15
XC IN/OUT
14
ZC IN/OUT
13
Z1 IN/OUT
12
Z0 IN/OUT
11
AZ IN/OUT
10
AX IN/OUT
9
AY IN/OUT

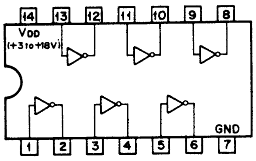

2
X0
1
X1
XC
15
OPEN
10
AX
5
Y0
3
Y1
YC
4
OPEN
9
AY
12
Z0
13
Z1
ZC
14
OPEN
11
AZ
EN
VEE
6
7

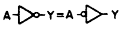
VEE*; VDD−VEE = +3 to+18V

CONT. INPUTS		ON CHANNEL
EN	A (X,Y,Z,)	
0	0	0
0	1	1
1	X	OPEN

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE.

TC4069UBF (TOSHIBA) FLAT PACKAGE
TC4069UBP (TOSHIBA)
C-MOS INVERTER
— TOP VIEW —


14
13
12
11
10
9
8
VDD
(+3 to+18V)
GND
1
2
3
4
5
6
7

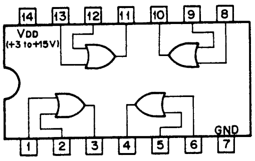


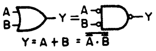
$Y=\bar{A}$

A	Y
0	1
1	0

0; LOW LEVEL
1; HIGH LEVEL

TC4071BP (TOSHIBA)
C-MOS 2-INPUT OR GATE
— TOP VIEW —


14
13
12
11
10
9
8
VDD
(+3 to+15V)
GND
1
2
3
4
5
6
7

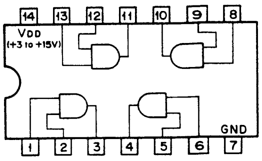


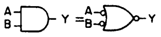
$Y=A+B=\overline{\bar{A}\cdot\bar{B}}$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

TC4081BP (TOSHIBA)
C-MOS 2-INPUT AND GATE
— TOP VIEW —


14
13
12
11
10
9
8
VDD
(+3 to +15V)
GND
1
2
3
4
5
6
7

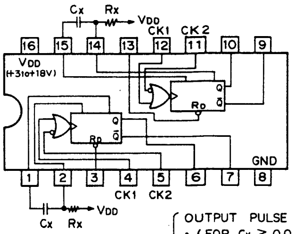


$Y = A \cdot B = \overline{\overline{A} + \overline{B}}$

A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

TC4528BFHB (TOSHIBA) FLAT PACKAGE
C-MOS RETRIGGERABLE/RESETTABLE MMV
— TOP VIEW —

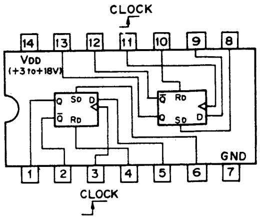

Cx
Rx
VDD
CK1
CK2
16
15
14
13
12
11
10
9
VDD
(+3to+18V)
Q
Q̄
RD
GND
1
2
3
4
5
6
7
8
CK1
CK2
Cx
Rx
VDD

INPUTS			OUTPUTS	
CK1	CK2	RD	Q	$\overline{Q}$
↑	1	1	⎍	⊔
↑	0	1	Q	$\overline{Q}$
1	↓	1	Q	$\overline{Q}$
0	↓	1	⎍	⊔
X	X	0	0	1

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

OUTPUT PULSE WIDTH Q OR $\overline{Q}$
- (FOR Cx ≧ 0.01μF USE FORMULA)
  PW = 0.2 · Rx · Cx · ℓn (VDD − GND)
- (FOR Cx < 0.01μF USE DATA BOOK.)

TC4013BP (TOSHIBA)
C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET
— TOP VIEW —


CLOCK
14
13
12
11
10
9
8
VDD
(+3 to +18V)
Q
SD
D
Q̄
RD
Q̄
RD
Q
SD
D
GND
1
2
3
4
5
6
7
CLOCK

DIRECT R-S FLIP FLOP

SD	RD	Q	$\overline{Q}$
0	0	Qn	$\overline{Qn}$
0	1	0	1
1	0	1	0
1	1	0	1

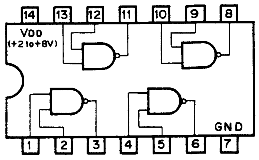
D-TYPE FLIP FLOP

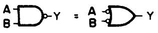
CKn	CKn+1
D	Q
0	0
1	1

CLOCK CK; ↑
CKn; BEFORE CLOCK
CKn+1; AFTER CLOCK

0; LOW LEVEL
1; HIGH LEVEL

TC40H000P (TOSHIBA)
C-MOS 2-INPUT NAND GATE
— TOP VIEW —


14
13
12
11
10
9
8
VDD
(+2 to +8V)
GND
1
2
3
4
5
6
7

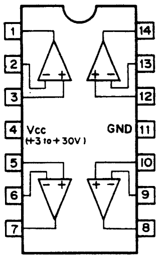


$Y = \overline{A \cdot B} = \overline{A} + \overline{B}$

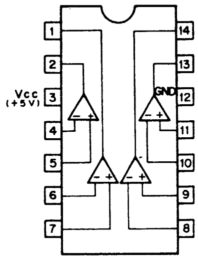
A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0; LOW LEVEL
1; HIGH LEVEL

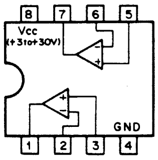
uPC324C (NEC)
QUAD. OP AMPLIFIER
— TOP VIEW —


1
2
3
4
5
6
7
14
13
12
11
10
9
8
Vcc
(+3 to +30V)
GND

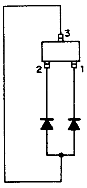
uPC339C (NEC)
COMPARATOR
— TOP VIEW —


1
2
3
4
5
6
7
14
13
12
11
10
9
8
Vcc
(+5V)
GND

uPC358C (NEC)
DUAL OPERATIONAL AMPLIFIERS
— TOP VIEW —

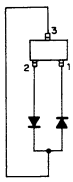

8
7
6
5
Vcc
(+3to+30V)
GND
1
2
3
4

TOP VIEW (SCALE 4/1)

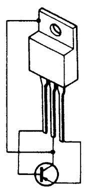


1S2835
1S2835-T1

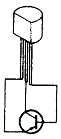
TOP VIEW (SCALE 4/1)



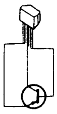
1SS123



2SA768
2SA771

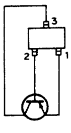


2SA844
2SA933

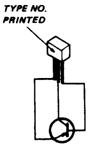


2SA1048
2SA1115

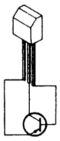
TOP VIEW (SCALE 4/1)



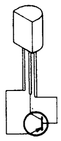
2SA1162
2SA1226


TYPE NO.
PRINTED

2SA1175
2SA1175F

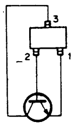


2SB733

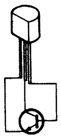


2SB739

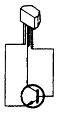
TOP VIEW (SCALE 4/1)



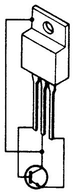
2SC1623
2SC2757



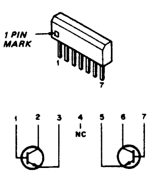
2SC1740
2SC2878



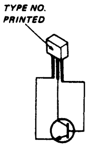
2SC1740S
2SC2458
2SC2603
2SC2603G
2SC403SP



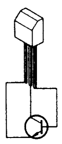
2SC1826


1 PIN
MARK
1
7
1
2
3
4
5
6
7
NC

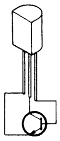
2SC2771


TYPE NO.
PRINTED

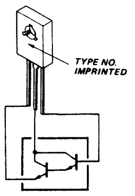
2SC2785E
2SC2785F
2SC2785K



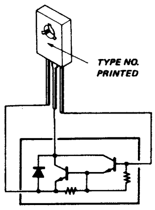
2SD773
2SD774



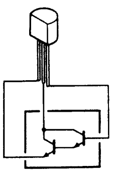
2SD788


TYPE NO.
IMPRINTED

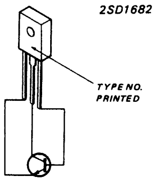
2SD894


TYPE NO.
PRINTED

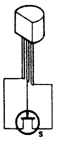
2SD998



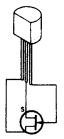
2SD1111


TYPE NO.
PRINTED

2SD1682

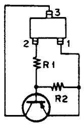


2SK105A

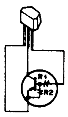


2SK523

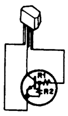
TOP VIEW (SCALE 4/1)



DTA124EK (R1=22K, R2=22K)
DTA144EK (R1=47K, R2=47K)

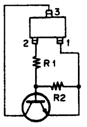


DTA124XS (R1=22K, R2=47K)
DTA144ES (R1=47K, R2=47K)



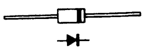
DTC124ES (R1=22K, R2=22K)
DTC124XS (R1=22K, R2=47K)
DTC144ES (R1=47K, R2=47K)

TOP VIEW (SCALE 4/1)

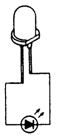


DTC144EK (R1=47K, R2=47K)

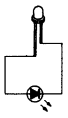
DIODE



10E-2
1S1555
1S1555S
1SS119
1SS133
1SS148
ERB12-? ?
SIB01-02

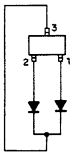


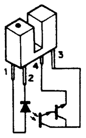
GL-5HD5 ; RED



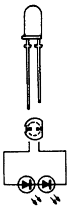
TLY123 ; YELLOW
TLUY 154 ; YELLOW
TLUG 154 ; GREEN

TOP VIEW (SCALE 4/1) 1S2837

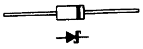




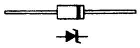
GP-1L52
GP-1L53



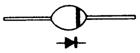
TLY255 ; YELLOW



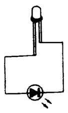
1SS97
1SS97-1
1SS99



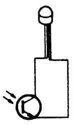
RD ? ?EB ?
RD ? ?ESB ?



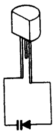
U05E



BR5104S ; RED



SPS102



FC54M

SECTION 14
PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

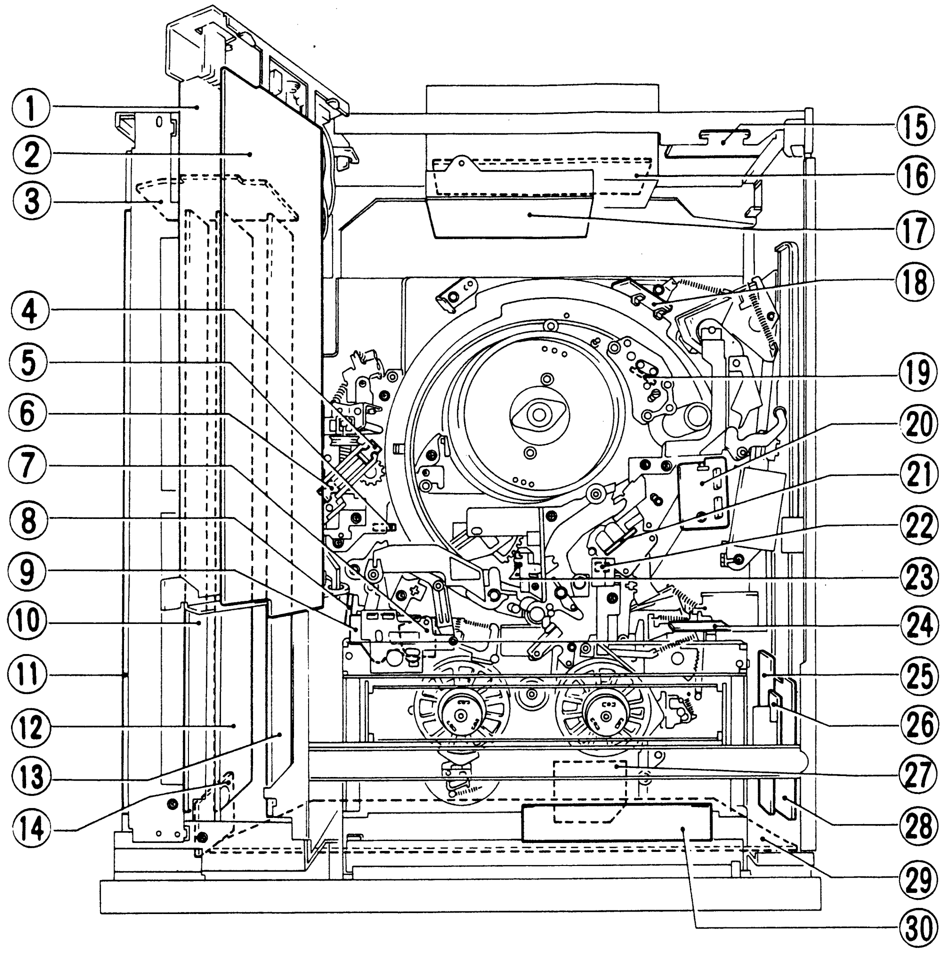
CIRCUIT FUNCTION OF THE PRINTED CIRCUIT BOARD

Circuit information is provided below.

SYSTEM	BOARD	CIRCUIT FUNCTION
VIDEO	RP-35A	PB Amplifier
	VP-26	Y PB (Y/C Separator)
	CO-7A	Color PB
AUDIO	AU-82A	PB Amplifier
	AU-89A	Dolby
	CP-112A	Output Amplifier
	DUS-92	Audio CTL Head
	DUS-147	Audio CTL Head
	HP-30	Headphones
	MC-28	MIC In
	MT-29	Audio Level Meter
SERVO	EC-28	CTL Head
	DUS-92	Audio CTL Head
	DUS-147	Audio CTL Head
	PT-9	Reel Motor Driver
	SV-93E	Servo System
POWER	AC-89	AC Input
	DC-31A	DC Supply
	UR-14E	Switching Regulator
KEY	KY-105E	Function Key/Display
SYSTEM CONTROL	IF-132	33P Interface
	PD-40A	Plunger Solenoids
	PD-41	Plunger Solenoids
	PH-5	Tape Beginning/End Sensor
	SY-106A	System Control
OTHERS	CC-31	Cassette Compartment Driver
	CC-32	Cassette In Detector
	CC-33	Cassette Down Detector
	LM-13	Threading Motor
	LP-41	Cassette Compartment Light

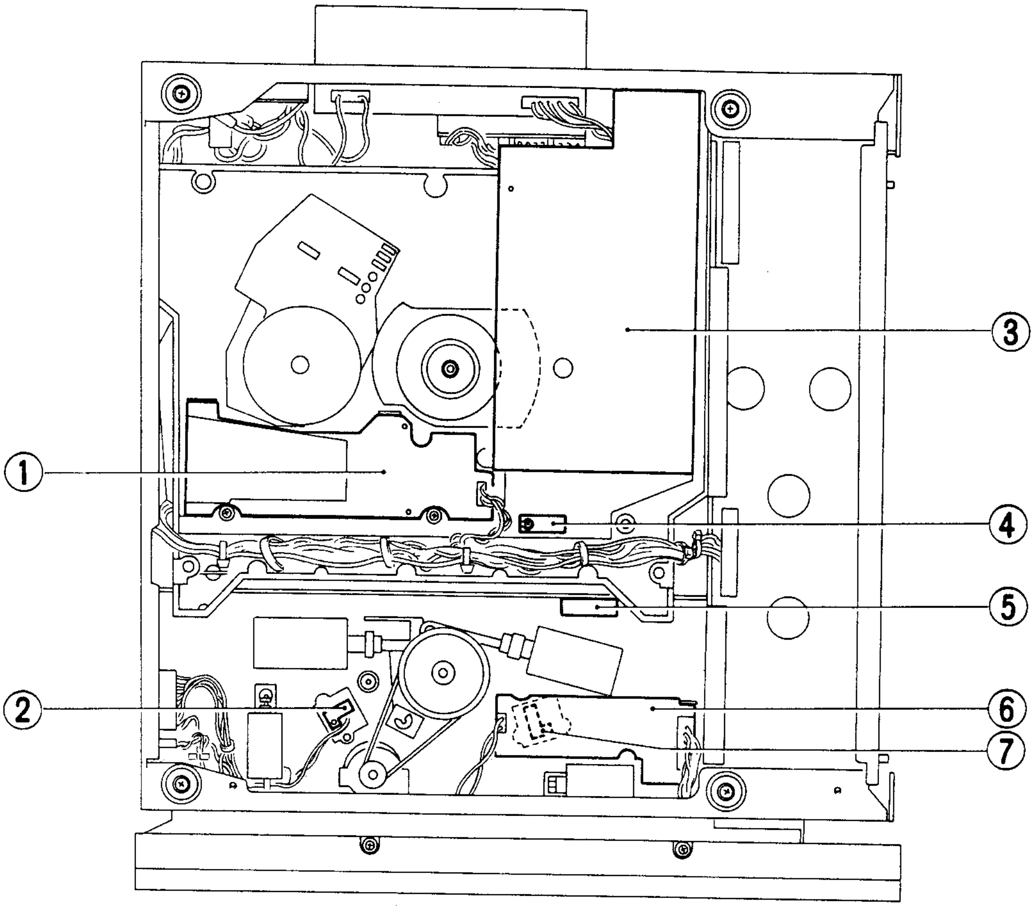
SYSTEM	BOARD	CIRCUIT FUNCTION
OTHERS	PTC-30	SP, Miss REC. KCA Detector
	PTC-33	FR Stop Detector
	PTC-34	Unthreadend Detector
	PTC-35	S/T Reel Rotation Detector
	RM-39	Reel Motor
	SE-46	Tension Regulator Detector
	TG-22	Tension Regulator LED

LOCATION OF THE PRINTED CIRCUIT BOARD
⟨TOP VIEW⟩



1 VP-26 Board
2 CO-7A Board
3 CP-112A Board
4 PH-5 Board
5 LM-13 Board
6 PH-5 Board
7 SE-46 Board
8 PTC-34 Board
9 PTC-30 Board
10 AU-89A Board
11 AU-82A Board
12 SV-93E Board
13 SY-106A Board
14 HP-30 Board
15 AC-89 Board
16 UR-14E Board
17 DC-31A Board
18 PTC-33 Board
19 DUS-92 Board
20 DUS-147 Board
21 EC-28 Board
22 PH-5 Board
23 PH-5 Board
24 CC-33 Board
25 CC-32 Board
26 CC-31 Board
27 RM-39 Board
28 PD-40A Board
29 KY-105E Board
30 LP-41 Board

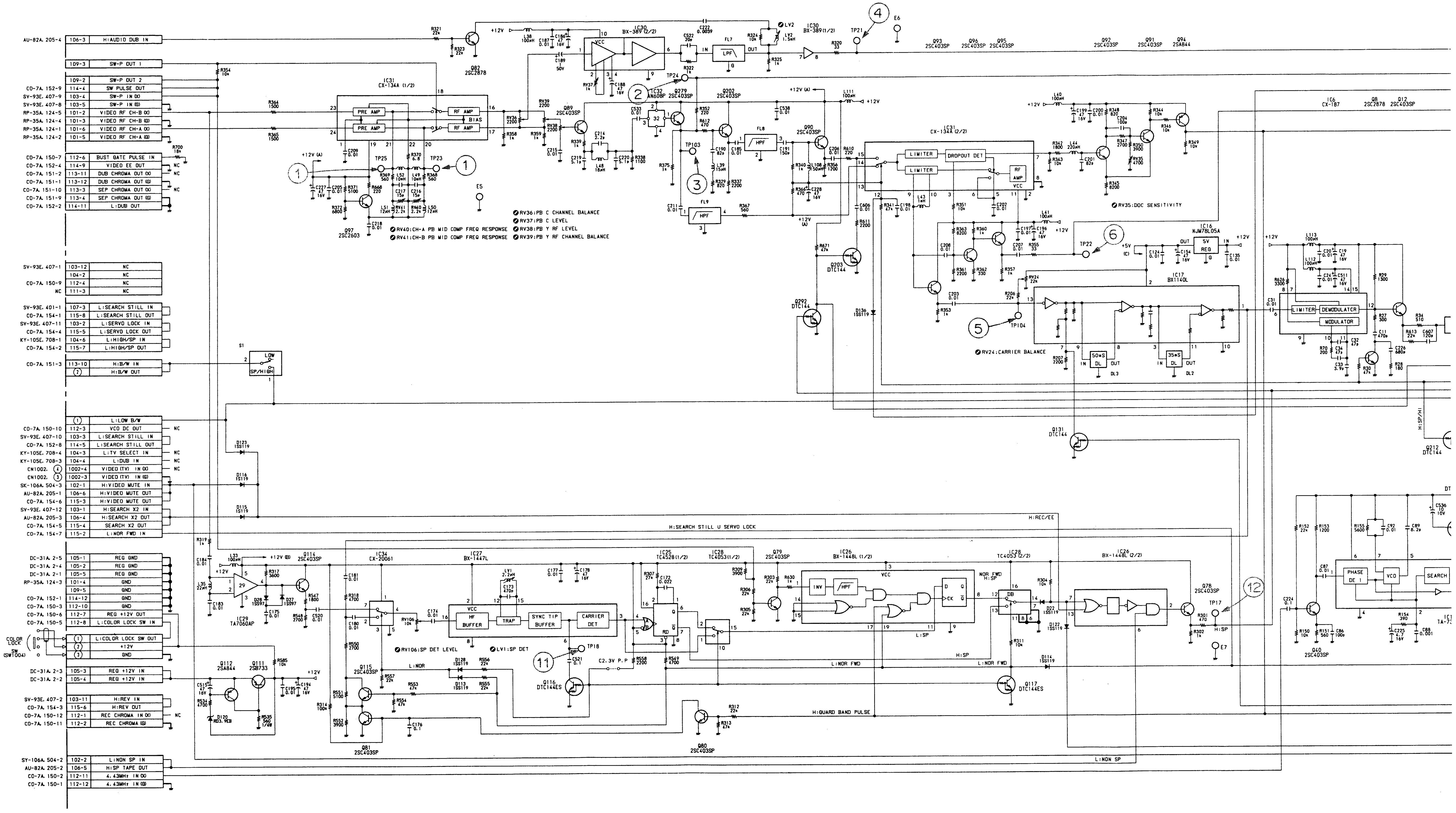
⟨BOTTOM VIEW⟩

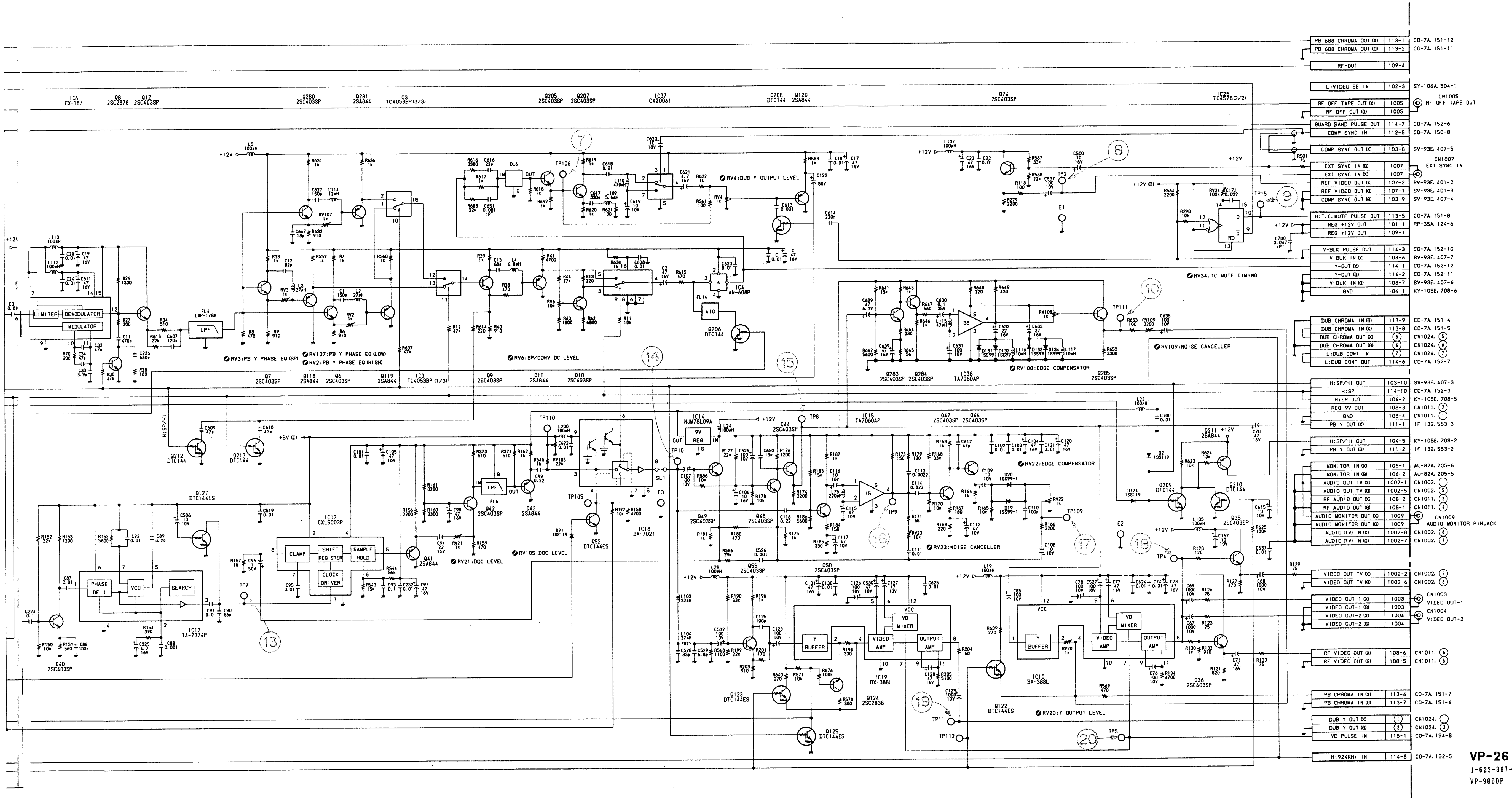


1 RP-35A Board
2 PTC-35 Board
3 IF-132 Board
4 PT-9 Board
5 TG-22 Board
6 PD-41 Board
7 PTC-35 Board

VP-26:Y PB

EK;S/N 10001 thru 11050

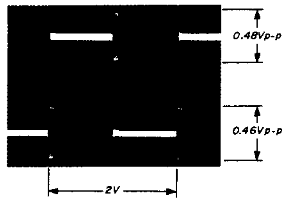

IC31 CX-134A (1/2)
PRE AMP
RF AMP
BIAS
IC30 BX-389 (2/2)
VCC
LPF
FL7
IC30 BX-389 (1/2)
IC32 AN608P
FL8
HPF
FL9
IC31 CX-134A (2/2)
LIMITER
DROPOUT DET
RF AMP
IC6 CX-187
IC16 NJM78L05A
5V REG
IC17 BX1140L
LIMITER
DEMODULATOR
MODULATOR
DL3
DL2
IC29 TA7060AP
IC34 CX-20061
IC27 BX-1447L
HF BUFFER
TRAP
SYNC TIP BUFFER
CARRIER DET
IC25 TC4528 (1/2)
IC28 TC4053 (1/2)
IC26 BX-1448L (1/2)
INV
IC28 TC4053 (2/2)
IC26 BX-1448L (2/2)
PHASE DET
VCO
SEARCH
RV36:PB C CHANNEL BALANCE
RV37:PB C LEVEL
RV38:PB Y RF LEVEL
RV39:PB Y RF CHANNEL BALANCE
RV40:CH-A PB MID COMP FREQ RESPONSE
RV41:CH-B PB MID COMP FREQ RESPONSE
RV35:DOC SENSITIVITY
RV24:CARRIER BALANCE
RV106:SP DET LEVEL
LV1:SP DET
H:SEARCH STILL U SERVO LOCK
H:REC/EE
H:GUARD BAND PULSE
L:NON SP
L:NOR FWD
H:SP
L:SP
C2.3V P.P
TP17
TP18
TP21
TP22
TP23
TP24
TP25
TP103
TP104
E5
E6
E7
1
2
3
4
5
6
11
12
H:AUDIO DUB IN
SW-P OUT 1
SW-P OUT 2
SW PULSE OUT
SW-P IN
VIDEO RF CH-B
VIDEO RF CH-A
BUST GATE PULSE IN
VIDEO EE OUT
DUB CHROMA OUT
SEP CHROMA OUT
L:DUB OUT
L:SEARCH STILL IN
L:SEARCH STILL OUT
L:SERVO LOCK IN
L:SERVO LOCK OUT
L:HIGH/SP IN
L:HIGH/SP OUT
H:B/W IN
H:B/W OUT
L:LOW B/W
VCO DC OUT
L:TV SELECT IN
L:DUB IN
VIDEO (TV) IN
H:VIDEO MUTE IN
H:VIDEO MUTE OUT
H:SEARCH X2 IN
H:SEARCH X2 OUT
SEARCH X2 OUT
L:NOR FWD IN
REG GND
GND
REG +12V OUT
L:COLOR LOCK SW IN
L:COLOR LOCK SW OUT
+12V
REG +12V IN
H:REV IN
H:REV OUT
REC CHROMA IN
REC CHROMA
L:NON SP IN
H:SP TAPE OUT
4.43MHz IN
COLOR LOCK SW (SW1004)
S1
LOW
SP/HIGH
NC


IC6 CX-187
Q8 2SC2878
Q12 2SC403SP
Q280 2SC403SP
Q281 2SA844
IC3 TC4053BP (3/3)
Q205 2SC403SP
Q207 2SC403SP
IC37 CX20061
Q208 DTC144
Q120 2SA844
Q74 2SC403SP
IC25 TC4528(2/2)
LIMITER
DEMODULATOR
MODULATOR
FL4 LOP-1788
LPF
DL6
IC4 AN-608P
FL14
410
Q206 DTC144
TP106
TP2
E1
TP15
TP111
RV4:DUB Y OUTPUT LEVEL
RV3:PB Y PHASE EQ (SP)
RV107:PB Y PHASE EQ (LOW)
RV2:PB Y PHASE EQ (HIGH)
RV6:SP/CONV DC LEVEL
RV34:TC MUTE TIMING
RV108:EDGE COMPENSATOR
RV109:NOISE CANCELLER
Q7 2SC403SP
Q118 2SA844
Q6 2SC403SP
Q119 2SA844
IC3 TC4053BP (1/3)
Q9 2SC403SP
Q11 2SA844
Q10 2SC403SP
Q283 2SC403SP
Q284 2SC403SP
IC38 TA7060AP
Q285 2SC403SP
H:SP/HI
Q212 DTC144
Q213 DTC144
+5V (C)
TP110
LPF
FL6
Q42 2SC403SP
Q43 2SA844
TP105
Q52 DTC144ES
IC18 BA-7021
SL1
E3
TP10
IC14 NJM78L09A
9V REG
TP8
Q44 2SC403SP
IC15 TA7060AP
Q47 2SC403SP
Q46 2SC403SP
RV22:EDGE COMPENSATOR
TP9
TP109
RV23:NOISE CANCELLER
Q49 2SC403SP
Q48 2SC403SP
Q211 2SA844
Q209 DTC144
Q210 DTC144
Q35 2SC403SP
E2
TP4
Q127 DTC144ES
IC13 CXL5003P
CLAMP
SHIFT REGISTER
SAMPLE HOLD
CLOCK DRIVER
Q41 2SA844
RV21:DOC LEVEL
RV105:DOC LEVEL
D21 1SS119
PHASE DET
VCO
SEARCH
IC12 TA-7374P
TP7
Q40 2SC403SP
Q55 2SC403SP
Q50 2SC403SP
Y BUFFER
VIDEO AMP
VCC
VD MIXER
OUTPUT AMP
IC19 BX-388L
Q123 DTC144ES
Q124 2SC2838
Q125 DTC144ES
TP11
TP112
Q122 DTC144ES
RV20:Y OUTPUT LEVEL
IC10 BX-388L
Q36 2SC403SP
TP5
+12V
PB 688 CHROMA OUT (X) | 113-1 | CO-7A, 151-12
PB 688 CHROMA OUT (G) | 113-2 | CO-7A, 151-11
RF-OUT | 109-4
L:VIDEO EE IN | 102-3 | SY-106A, 504-1
RF OFF TAPE OUT (X) | 1005 | CN1005 RF OFF TAPE OUT
RF OFF OUT (G) | 1005
GUARD BAND PULSE OUT | 114-7 | CO-7A, 152-6
COMP SYNC IN | 112-5 | CO-7A, 150-8
COMP SYNC OUT (X) | 103-8 | SV-93E, 407-5
EXT SYNC IN (G) | 1007 | CN1007 EXT SYNC IN
EXT SYNC IN (X) | 1007
REF VIDEO OUT (X) | 107-2 | SV-93E, 401-2
REF VIDEO OUT (G) | 107-1 | SV-93E, 401-3
COMP SYNC OUT (G) | 103-9 | SV-93E, 407-4
H:T.C.MUTE PULSE OUT | 113-5 | CO-7A, 151-8
REG +12V OUT | 101-1 | RP-35A, 124-6
REG +12V OUT | 109-1
V-BLK PULSE OUT | 114-3 | CO-7A, 152-10
V-BLK IN (X) | 103-6 | SV-93E, 407-7
Y-OUT (X) | 114-1 | CO-7A, 152-12
Y-OUT (G) | 114-2 | CO-7A, 152-11
V-BLK IN (G) | 103-7 | SV-93E, 407-6
GND | 104-1 | KY-105E, 708-6
DUB CHROMA IN (G) | 113-9 | CO-7A, 151-4
DUB CHROMA IN (X) | 113-8 | CO-7A, 151-5
DUB CHROMA OUT (X) | ⑤ | CN1024, ⑤
DUB CHROMA OUT (G) | ⑥ | CN1024, ⑥
L:DUB CONT IN | ⑦ | CN1024, ⑦
L:DUB CONT OUT | 114-6 | CO-7A, 152-7
H:SP/HI OUT | 103-10 | SV-93E, 407-3
H:SP | 114-10 | CO-7A, 152-3
H:SP OUT | 104-2 | KY-105E, 708-5
REG 9V OUT | 108-3 | CN1011, ②
GND | 108-4 | CN1011, ①
PB Y OUT (X) | 111-1 | IF-132, 553-3
H:SP/HI OUT | 104-5 | KY-105E, 708-2
PB Y OUT (G) | 111-2 | IF-132, 553-2
MONITOR IN (X) | 106-1 | AU-82A, 205-6
MONITOR IN (G) | 106-2 | AU-82A, 205-5
AUDIO OUT TV (X) | 1002-1 | CN1002, ①
AUDIO OUT TV (G) | 1002-5 | CN1002, ⑤
RF AUDIO OUT (X) | 108-2 | CN1011, ③
RF AUDIO OUT (G) | 108-1 | CN1011, ④
AUDIO MONITOR OUT (X) | 1009 | CN1009 AUDIO MONITOR PINJACK
AUDIO MONITOR OUT (G) | 1009
AUDIO (TV) IN (X) | 1002-8 | CN1002, ⑧
AUDIO (TV) IN (G) | 1002-7 | CN1002, ⑦
VIDEO OUT TV (X) | 1002-2 | CN1002, ②
VIDEO OUT TV (G) | 1002-6 | CN1002, ⑥
VIDEO OUT-1 (X) | 1003 | CN1003 VIDEO OUT-1
VIDEO OUT-1 (G) | 1003
VIDEO OUT-2 (X) | 1004 | CN1004 VIDEO OUT-2
VIDEO OUT-2 (G) | 1004
RF VIDEO OUT (X) | 108-6 | CN1011, ⑥
RF VIDEO OUT (G) | 108-5 | CN1011, ⑤
PB CHROMA IN (X) | 113-6 | CO-7A, 151-7
PB CHROMA IN (G) | 113-7 | CO-7A, 151-6
DUB Y OUT (X) | ① | CN1024, ①
DUB Y OUT (G) | ② | CN1024, ②
VD PULSE IN | 115-1 | CO-7A, 154-8
H:924KHz IN | 114-8 | CO-7A, 152-5
⑦
⑧
⑨
⑩
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳

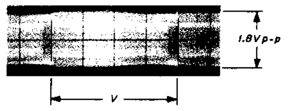
VP-26
1-622-397-11
VP-9000P

① TP25 PB

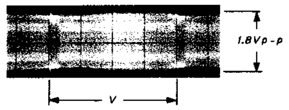
① TP23 PB



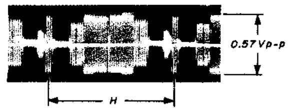
② TP24 PB



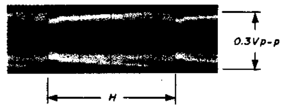
③ TP103 PB



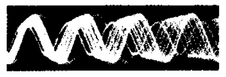
④ TP21 PB



⑤ TP104 PB

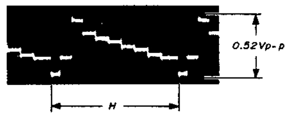


⑥ TP22 PB

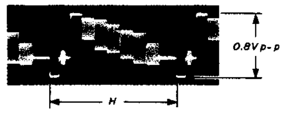


H; 0.1μsec/dIV
V; 0.5V/dIV

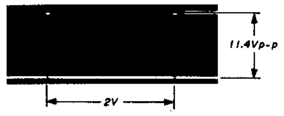
⑦ TP106 PB



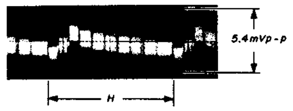
⑧ TP2 PB



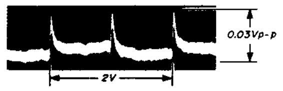
⑨ TP15 PB



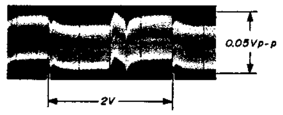
⑩ TP111 PB



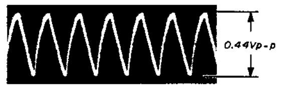
⑪ TP18 PB



⑫ TP17 PB

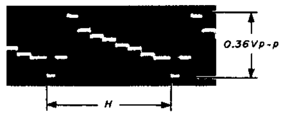


⑬ TP7 PB

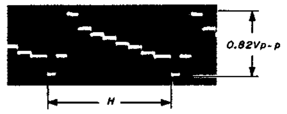


13.3MHz

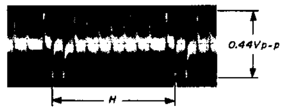
⑭ TP10 PB



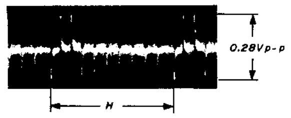
⑮ TP8 PB



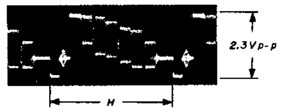
⑯ TP9 PB



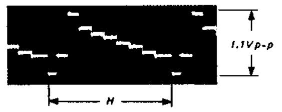
⑰ TP109 PB



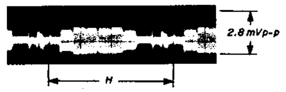
⑱ TP4 PB



⑲ TP11 PB



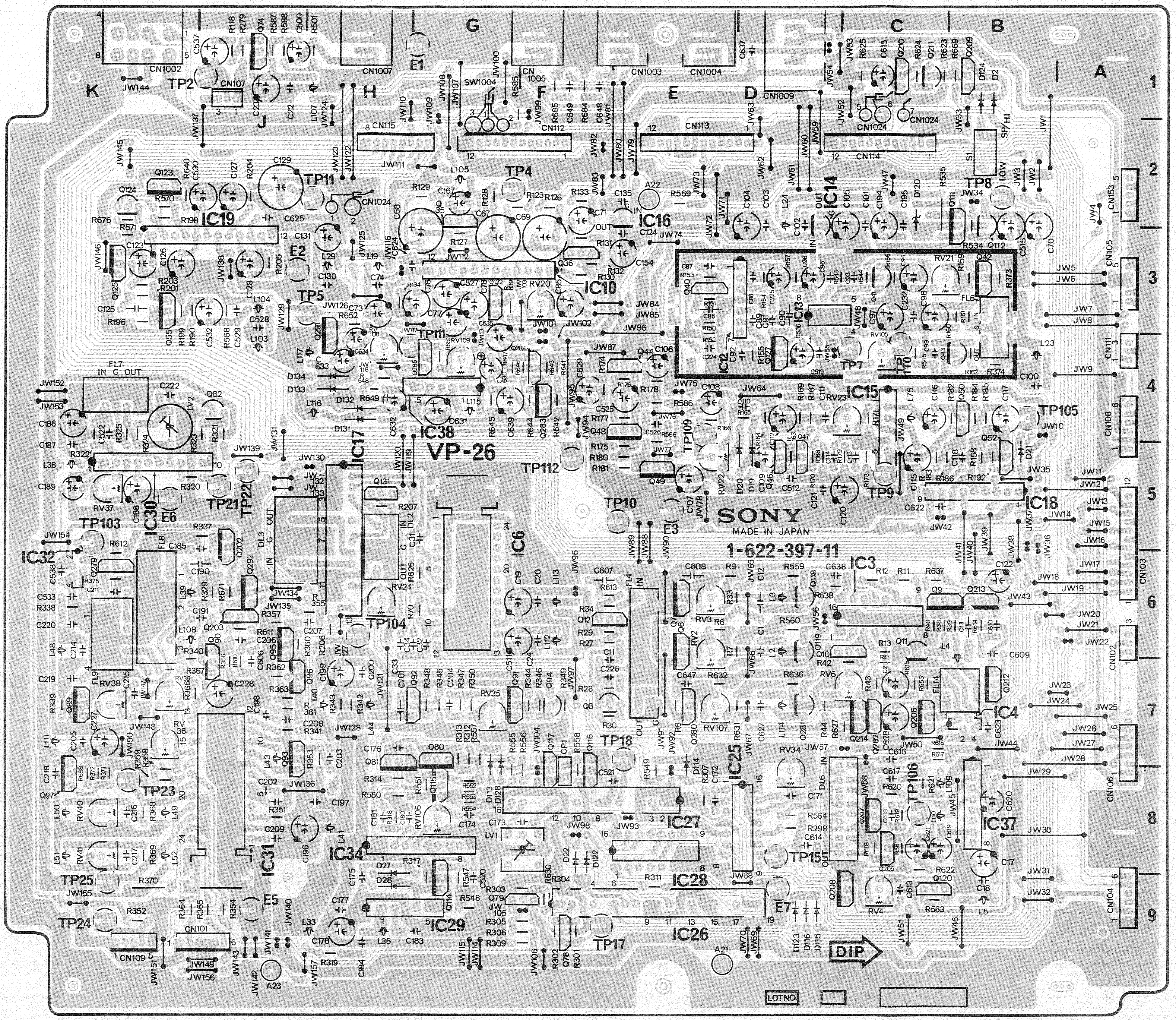
⑳ TP5 PB



VP-26; Y PB
EK; S/N 10001 thru 11050

VP-26 (1-622-397-11)

CN101	J-9
CN102	A-6
CN103	A-5
CN104	A-9
CN105	A-3
CN106	A-7
CN107	J-1
CN108	A-4
CN109	K-9
CN111	A-4
CN112	G-2
CN113	E-2
CN114	C-2
CN115	H-2
CN153	A-2
CN1002	K-1
CN1003	E-1
CN1004	E-1
CN1005	F-1
CN1007	H-1
CP1	F-8
D2	B-1
D19	D-5
D20	D-5
D21	B-5
D22	F-8
D27	H-9
D28	H-9
D113	G-8
D114	E-7
D115	D-9
D116	D-9
D120	C-2
D122	F-8
D123	D-9
D124	B-1
D128	G-8
D131	H-4
D132	H-4
D133	H-4
D134	H-4
D136	E-7
D137	A-8
DL2	H-5
DL3	J-5
DL6	C-8
E1	G-1
E2	J-3
E3	E-5
E5	J-9
E6	K-5
E7	D-9
EB1	K-1
EB2	K-1
EB3	D-1
EB4	D-1
FL4	E-6
FL6	B-3
FL7	K-4
FL8	K-6
FL9	K-6
FL14	B-7
IC3	C-6
IC4	B-7
IC6	G-6
IC10	G-3
IC12	D-3
IC13	D-3
IC14	D-2
IC15	C-4
IC16	E-2
IC17	H-5
IC18	B-5
IC19	K-3
IC25	D-8
IC26	E-9
IC27	F-8
IC28	E-8
IC29	H-9
IC30	K-5
IC31	J-8
IC32	K-6
IC34	H-8
IC37	B-8
IC38	G-4
LV1	F-8
LV2	K-4
Q6	E-6
Q7	E-6
Q8	F-7
Q9	B-6
Q10	C-6
Q11	C-6
Q12	F-6
Q35	G-2
Q36	F-3
Q40	E-3
Q41	C-3
Q42	B-3
Q43	B-4
Q44	E-4
Q46	D-5
Q47	D-5
Q48	E-4
Q49	E-5
Q50	B-4
Q52	B-5
Q55	K-3
Q74	J-1
Q78	F-9
Q79	F-9
Q80	G-7
Q81	H-7
Q82	J-4
Q89	K-7
Q90	J-7
Q91	F-7
Q92	G-7
Q93	J-7
Q94	F-7
Q95	J-6
Q96	J-7
Q97	K-8
Q111	B-2
Q112	B-2
Q114	G-9
Q115	G-8
Q116	F-8
Q117	F-8
Q118	D-6
Q119	D-6
Q120	C-9
Q122	G-3
Q123	K-2
Q124	K-2
Q125	K-3
Q127	D-4
Q131	H-5
Q202	J-5
Q203	J-6
Q205	C-8
Q206	C-7
Q207	C-8
Q208	C-9
Q209	B-1
Q210	C-1
Q211	C-1
Q212	B-7
Q213	B-6
Q279	K-6
Q280	E-7
Q281	D-7
Q283	F-4
Q284	F-4
Q285	G-4
Q292	J-6
Q300	A-8
RV2	E-6
RV3	E-6
RV4	C-9
RV6	C-7
RV20	F-3
RV21	C-3
RV22	E-5
RV23	C-4
RV24	H-6
RV34	D-8
RV35	G-7
RV36	K-7
RV37	K-5
RV38	K-7
RV39	K-7
RV40	K-8
RV41	K-8
RV105	C-4
RV106	G-8
RV107	E-7
RV108	H-4
RV109	G-4
S1	B-2
TP2	J-1
TP4	G-2
TP5	H-3
TP7	C-4
TP8	B-2
TP9	C-5
TP10	E-5
TP11	H-2
TP15	D-8
TP17	F-9
TP18	E-7
TP21	J-5
TP22	J-5
TP23	K-8
TP24	K-9
TP25	K-9
TP103	K-5
TP104	H-6
TP105	B-4
TP106	C-8
TP109	E-4
TP110	C-4
TP111	H-4
TP112	F-5
TP113	B-5


K
J
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
CN1002
CN107
CN1007
E1
CN1005
SW1004
CN1003
CN1004
CN1009
CN1024
CN115
CN112
CN113
CN114
CN153
CN105
CN111
CN108
CN103
CN102
CN106
CN104
CN109
CN101
TP2
TP11
TP4
TP5
TP8
TP7
TP105
TP109
TP112
TP10
TP9
TP21
TP22
TP103
TP104
TP18
TP106
TP15
TP17
TP23
TP25
TP24
IC19
IC16
IC14
IC10
IC13
IC12
IC11
IC15
IC38
IC17
IC18
IC30
IC32
IC6
IC3
IC4
IC25
IC27
IC28
IC26
IC37
IC34
IC31
IC29
E2
E3
E5
E6
E7
FL7
VP-26
SONY
MADE IN JAPAN
1-622-397-11
DIP
LOT NO.
A21
A22
A23

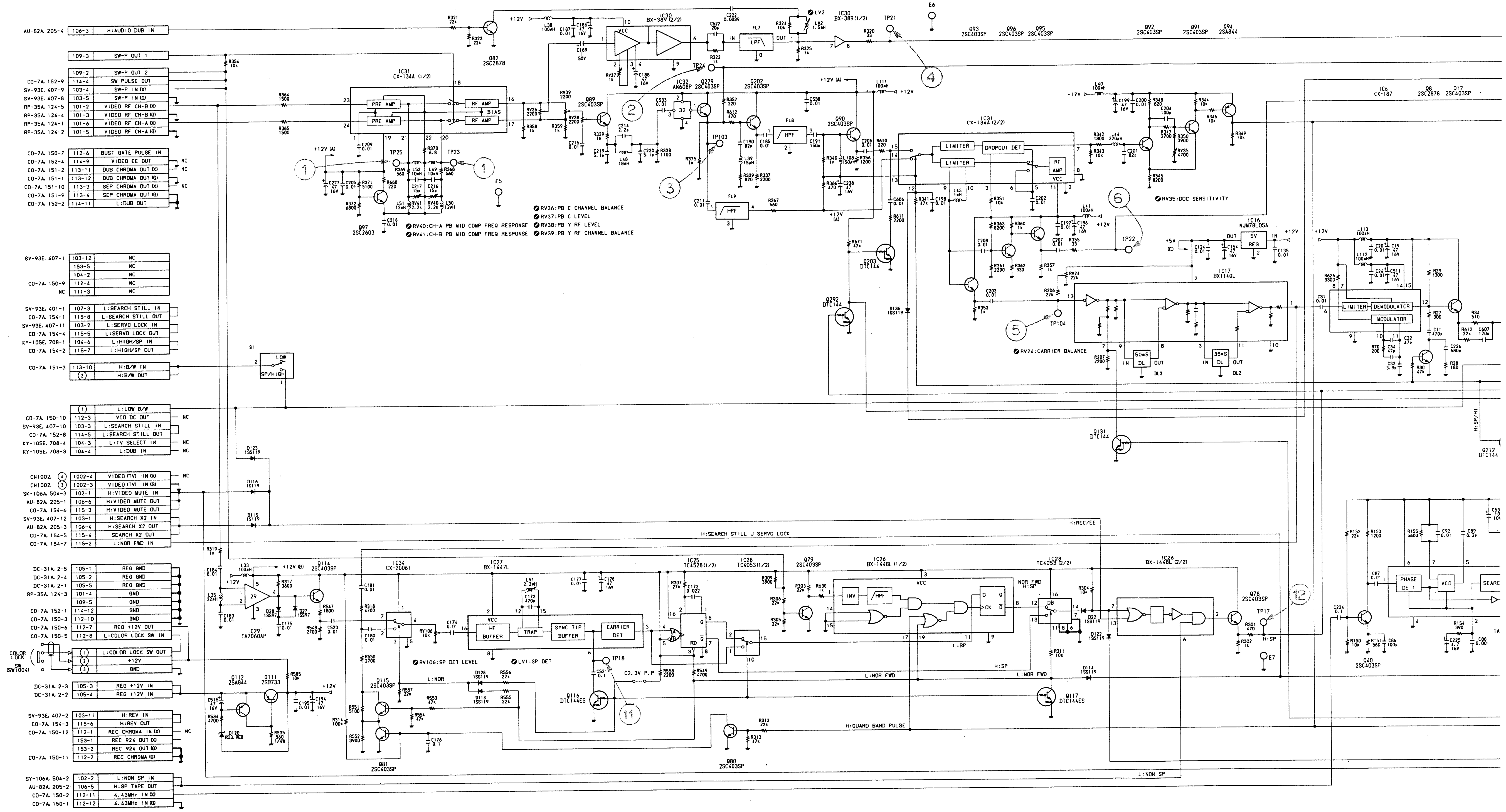
VP-26

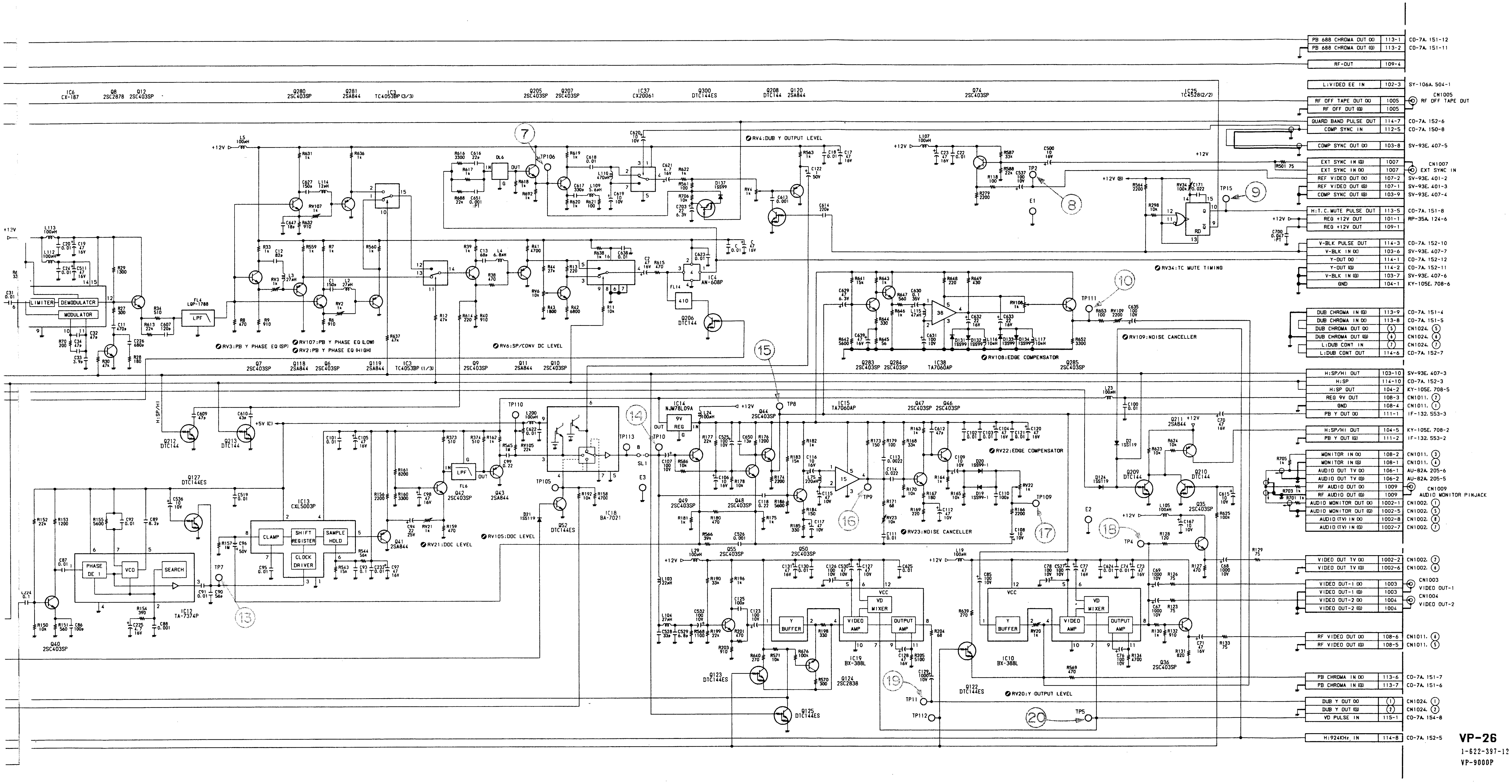
-COMPONENT SIDE-

1-622-397-11

VP-9000P

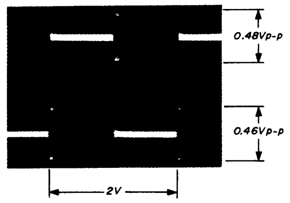
VP-26 ; Y PB
EK ; S/N 11051 and higher


AU-82A. 205-4 | 106-3 | H:AUDIO DUB IN
109-3 | SW-P OUT 1
109-2 | SW-P OUT 2
CO-7A. 152-9 | 114-4 | SW PULSE OUT
SV-93E. 407-9 | 103-4 | SW-P IN (X)
SV-93E. 407-8 | 103-5 | SW-P IN (G)
RP-35A. 124-5 | 101-2 | VIDEO RF CH-B (X)
RP-35A. 124-4 | 101-3 | VIDEO RF CH-B (G)
RP-35A. 124-1 | 101-6 | VIDEO RF CH-A (X)
RP-35A. 124-2 | 101-5 | VIDEO RF CH-A (G)
CO-7A. 150-7 | 112-6 | BUST GATE PULSE IN
CO-7A. 152-4 | 114-9 | VIDEO EE OUT
CO-7A. 151-2 | 113-11 | DUB CHROMA OUT (X)
CO-7A. 151-1 | 113-12 | DUB CHROMA OUT (G)
CO-7A. 151-10 | 113-3 | SEP CHROMA OUT (X)
CO-7A. 151-9 | 113-4 | SEP CHROMA OUT (G)
CO-7A. 152-2 | 114-11 | L:DUB OUT
NC
SV-93E. 407-1 | 103-12 | NC
153-5 | NC
104-2 | NC
CO-7A. 150-9 | 112-4 | NC
NC | 111-3 | NC
SV-93E. 401-1 | 107-3 | L:SEARCH STILL IN
CO-7A. 154-1 | 115-8 | L:SEARCH STILL OUT
SV-93E. 407-11 | 103-2 | L:SERVO LOCK IN
CO-7A. 154-4 | 115-5 | L:SERVO LOCK OUT
KY-105E. 708-1 | 104-6 | L:HIGH/SP IN
CO-7A. 154-2 | 115-7 | L:HIGH/SP OUT
CO-7A. 151-3 | 113-10 | H:B/W IN
② | H:B/W OUT
① | L:LOW B/W
CO-7A. 150-10 | 112-3 | VCO DC OUT
SV-93E. 407-10 | 103-3 | L:SEARCH STILL IN
CO-7A. 152-8 | 114-5 | L:SEARCH STILL OUT
KY-105E. 708-4 | 104-3 | L:TV SELECT IN
KY-105E. 708-3 | 104-4 | L:DUB IN
CN1002. ④ | 1002-4 | VIDEO (TV) IN (X)
CN1002. ③ | 1002-3 | VIDEO (TV) IN (G)
SK-106A. 504-3 | 102-1 | H:VIDEO MUTE IN
AU-82A. 205-1 | 106-6 | H:VIDEO MUTE OUT
CO-7A. 154-6 | 115-3 | H:VIDEO MUTE OUT
SV-93E. 407-12 | 103-1 | H:SEARCH X2 IN
AU-82A. 205-3 | 106-4 | H:SEARCH X2 OUT
CO-7A. 154-5 | 115-4 | SEARCH X2 OUT
CO-7A. 154-7 | 115-2 | L:NOR FWD IN
DC-31A. 2-5 | 105-1 | REG GND
DC-31A. 2-4 | 105-2 | REG GND
DC-31A. 2-1 | 105-5 | REG GND
RP-35A. 124-3 | 101-4 | GND
109-5 | GND
CO-7A. 152-1 | 114-12 | GND
CO-7A. 150-3 | 112-10 | GND
CO-7A. 150-6 | 112-7 | REG +12V OUT
CO-7A. 150-5 | 112-8 | L:COLOR LOCK SW IN
COLOR LOCK SW (SW1004)
① | L:COLOR LOCK SW OUT
② | +12V
③ | GND
DC-31A. 2-3 | 105-3 | REG +12V IN
DC-31A. 2-2 | 105-4 | REG +12V IN
SV-93E. 407-2 | 103-11 | H:REV IN
CO-7A. 154-3 | 115-6 | H:REV OUT
CO-7A. 150-12 | 112-1 | REC CHROMA IN (X)
153-1 | REC 924 OUT (X)
153-2 | REC 924 OUT (G)
CO-7A. 150-11 | 112-2 | REC CHROMA (G)
SY-106A. 504-2 | 102-2 | L:NON SP IN
AU-82A. 205-2 | 106-5 | H:SP TAPE OUT
CO-7A. 150-2 | 112-11 | 4.43MHz IN (X)
CO-7A. 150-1 | 112-12 | 4.43MHz IN (G)
IC31 CX-134A (1/2)
PRE AMP
RF AMP
BIAS
IC30 BX-389 (2/2)
VCC
FL7 LPF
IC30 BX-389 (1/2)
TP21
E6
TP24
IC32 AN608P
FL8 HPF
FL9 HPF
TP103
TP25
TP23
E5
Q97 2SC2603
Q82 2SC2878
Q89 2SC403SP
Q279 2SC403SP
Q202 2SC403SP
Q90 2SC403SP
Q93 2SC403SP
Q96 2SC403SP
Q95 2SC403SP
Q92 2SC403SP
Q91 2SC403SP
Q94 2SA844
IC31 CX-134A (2/2)
LIMITER
DROPOUT DET
RF AMP
VCC
Q203 DTC144
Q292 DTC144
TP104
TP22
IC16 NJM78L05A
5V REG
IC17 BX1140L
50×S DL
35×S DL
DL3
DL2
IC6 CX-187
LIMITER
DEMODULATOR
MODULATOR
Q8 2SC2878
Q12 2SC403SP
Q131 DTC144
Q212 DTC144
H:SP/HI
RV36:PB C CHANNEL BALANCE
RV37:PB C LEVEL
RV38:PB Y RF LEVEL
RV39:PB Y RF CHANNEL BALANCE
RV40:CH-A PB MID COMP FREQ RESPONSE
RV41:CH-B PB MID COMP FREQ RESPONSE
RV35:DOC SENSITIVITY
RV24:CARRIER BALANCE
①
②
③
④
⑤
⑥
S1 LOW SP/HIGH
H:REC/EE
H:SEARCH STILL U SERVO LOCK
IC29 TA7060AP
IC34 CX-20061
IC27 BX-1447L
VCC
HF BUFFER
TRAP
SYNC TIP BUFFER
CARRIER DET
RV106:SP DET LEVEL
LV1:SP DET
TP18
C2.3V P.P
⑪
IC25 TC4528 (1/2)
IC28 TC4053 (1/2)
IC26 BX-1448L (1/2)
INV
HPF
IC28 TC4053 (2/2)
IC26 BX-1448L (2/2)
NOR FWD H:SP
L:SP
H:SP
L:NOR FWD
L:NOR
H:GUARD BAND PULSE
L:NON SP
Q112 2SA844
Q111 2SB733
Q114 2SC403SP
Q115 2SC403SP
Q81 2SC403SP
Q116 DTC144ES
Q79 2SC403SP
Q80 2SC403SP
Q117 DTC144ES
Q78 2SC403SP
TP17
⑫
E7
PHASE DE 1
VCO
SEARC
Q40 2SC403SP

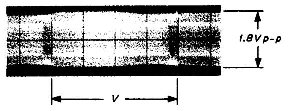

IC6 CX-187
Q8 2SC2878
Q12 2SC403SP
Q280 2SC403SP
Q281 2SA844
IC3 TC4053BP (3/3)
Q205 2SC403SP
Q207 2SC403SP
IC37 CX20061
Q300 DTC144ES
Q208 DTC144
Q120 2SA844
Q74 2SC403SP
IC25 TC4528(2/2)
LIMITER
DEMODULATOR
MODULATOR
FL4 LOP-1788
LPF
DL6
RV4:DUB Y OUTPUT LEVEL
RV3:PB Y PHASE EQ (SP)
RV107:PB Y PHASE EQ (LOW)
RV2:PB Y PHASE EQ (HIGH)
RV6:SP/CONV DC LEVEL
IC4 AN-608P
FL14
Q206 DTC144
Q7 2SC403SP
Q118 2SA844
Q6 2SC403SP
Q119 2SA844
IC3 TC4053BP (1/3)
Q9 2SC403SP
Q11 2SA844
Q10 2SC403SP
RV34:TC MUTE TIMING
RV108:EDGE COMPENSATOR
RV109:NOISE CANCELLER
Q283 2SC403SP
Q284 2SC403SP
IC38 TA7060AP
Q285 2SC403SP
TP111
TP2
TP15
E1
Q212 DTC144
Q213 DTC144
Q127 DTC144ES
IC13 CXL5003P
CLAMP
SHIFT REGISTER
SAMPLE HOLD
CLOCK DRIVER
Q41 2SA844
RV21:DOC LEVEL
Q42 2SC403SP
Q43 2SA844
FL6
LPF
TP110
TP113
TP105
Q52 DTC144ES
D21 1SS119
RV105:DOC LEVEL
IC18 BA-7021
SL1
E3
TP10
IC14 NJM78L09A
9V REG
Q44 2SC403SP
TP8
IC15 TA7060AP
Q47 2SC403SP
Q46 2SC403SP
RV22:EDGE COMPENSATOR
RV23:NOISE CANCELLER
TP9
TP109
Q49 2SC403SP
Q48 2SC403SP
PHASE DE 1
VCO
SEARCH
IC12 TA-7374P
TP7
Q40 2SC403SP
Q55 2SC403SP
Q50 2SC403SP
Y BUFFER
VIDEO AMP
VD MIXER
OUTPUT AMP
VCC
IC19 BX-388L
Q123 DTC144ES
Q124 2SC2838
Q125 DTC144ES
TP11
TP112
Q122 DTC144ES
IC10 BX-388L
RV20:Y OUTPUT LEVEL
TP5
TP4
E2
Q211 2SA844
D2 1SS119
D124 1SS119
Q209 DTC144
Q210 DTC144
Q35 2SC403SP
Q36 2SC403SP
+12V
+5V (C)
⑦ ⑧ ⑨ ⑩ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳
PB 688 CHROMA OUT (X) 113-1 CO-7A, 151-12
PB 688 CHROMA OUT (G) 113-2 CO-7A, 151-11
RF-OUT 109-4
L:VIDEO EE IN 102-3 SY-106A, 504-1
RF OFF TAPE OUT (X) 1005 CN1005 RF OFF TAPE OUT
RF OFF OUT (G) 1005
GUARD BAND PULSE OUT 114-7 CO-7A, 152-6
COMP SYNC IN 112-5 CO-7A, 150-8
COMP SYNC OUT (X) 103-8 SV-93E, 407-5
EXT SYNC IN (G) 1007
EXT SYNC IN (X) 1007 CN1007 EXT SYNC IN
REF VIDEO OUT (X) 107-2 SV-93E, 401-2
REF VIDEO OUT (G) 107-1 SV-93E, 401-3
COMP SYNC OUT (G) 103-9 SV-93E, 407-4
H:T.C. MUTE PULSE OUT 113-5 CO-7A, 151-8
REG +12V OUT 101-1 RP-35A, 124-6
REG +12V OUT 109-1
V-BLK PULSE OUT 114-3 CO-7A, 152-10
V-BLK IN (X) 103-6 SV-93E, 407-7
Y-OUT (X) 114-1 CO-7A, 152-12
Y-OUT (G) 114-2 CO-7A, 152-11
V-BLK IN (G) 103-7 SV-93E, 407-6
GND 104-1 KY-105E, 708-6
DUB CHROMA IN (G) 113-9 CO-7A, 151-4
DUB CHROMA IN (X) 113-8 CO-7A, 151-5
DUB CHROMA OUT (X) ⑤ CN1024, ⑤
DUB CHROMA OUT (G) ⑥ CN1024, ⑥
L:DUB CONT IN ⑦ CN1024, ⑦
L:DUB CONT OUT 114-6 CO-7A, 152-7
H:SP/HI OUT 103-10 SV-93E, 407-3
H:SP 114-10 CO-7A, 152-3
H:SP OUT 104-2 KY-105E, 708-5
REG 9V OUT 108-3 CN1011, ②
GND 108-4 CN1011, ①
PB Y OUT (X) 111-1 IF-132, 553-3
H:SP/HI OUT 104-5 KY-105E, 708-2
PB Y OUT (G) 111-2 IF-132, 553-2
MONITOR IN (X) 108-2 CN1011, ③
MONITOR IN (G) 108-1 CN1011, ④
AUDIO OUT TV (X) 106-1 AU-82A, 205-6
AUDIO OUT TV (G) 106-2 AU-82A, 205-5
RF AUDIO OUT (X) 1009 CN1009 AUDIO MONITOR PINJACK
RF AUDIO OUT (G) 1009
AUDIO MONITOR OUT (X) 1002-1 CN1002, ①
AUDIO MONITOR OUT (G) 1002-5 CN1002, ⑤
AUDIO (TV) IN (X) 1002-8 CN1002, ⑧
AUDIO (TV) IN (G) 1002-7 CN1002, ⑦
VIDEO OUT TV (X) 1002-2 CN1002, ②
VIDEO OUT TV (G) 1002-6 CN1002, ⑥
VIDEO OUT-1 (X) 1003 CN1003 VIDEO OUT-1
VIDEO OUT-1 (G) 1003
VIDEO OUT-2 (X) 1004 CN1004 VIDEO OUT-2
VIDEO OUT-2 (G) 1004
RF VIDEO OUT (X) 108-6 CN1011, ⑥
RF VIDEO OUT (G) 108-5 CN1011, ⑤
PB CHROMA IN (X) 113-6 CO-7A, 151-7
PB CHROMA IN (G) 113-7 CO-7A, 151-6
DUB Y OUT (X) ① CN1024, ①
DUB Y OUT (G) ② CN1024, ②
VD PULSE IN 115-1 CO-7A, 154-8
H:924KHz IN 114-8 CO-7A, 152-5
VP-26
1-622-397-12
VP-9000P

① TP25 PB

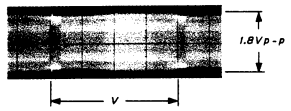
① TP23 PB



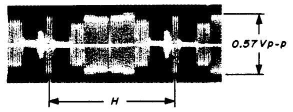
② TP24 PB



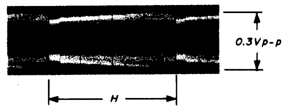
③ TP103 PB



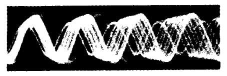
④ TP21 PB



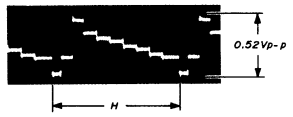
⑤ TP104 PB



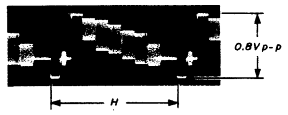
⑥ TP22 PB



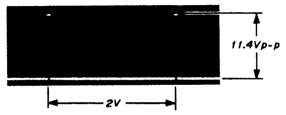
⑦ TP106 PB



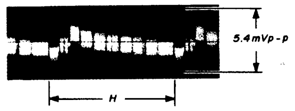
⑧ TP2 PB



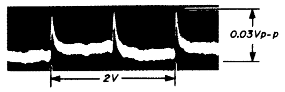
⑨ TP15 PB



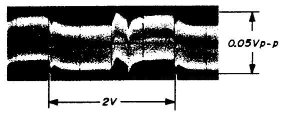
⑩ TP111 PB



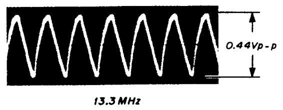
⑪ TP18 PB



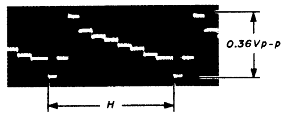
⑫ TP17 PB



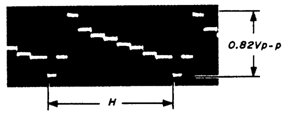
⑬ TP7 PB



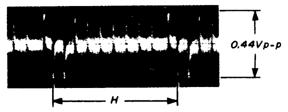
⑭ TP10 PB



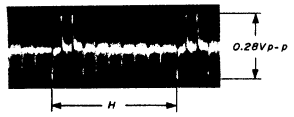
⑮ TP8 PB



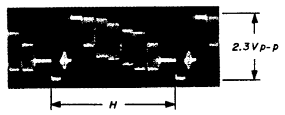
⑯ TP9 PB



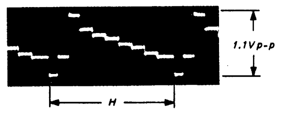
⑰ TP109 PB



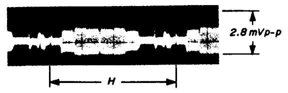
⑱ TP4 PB



⑲ TP11 PB



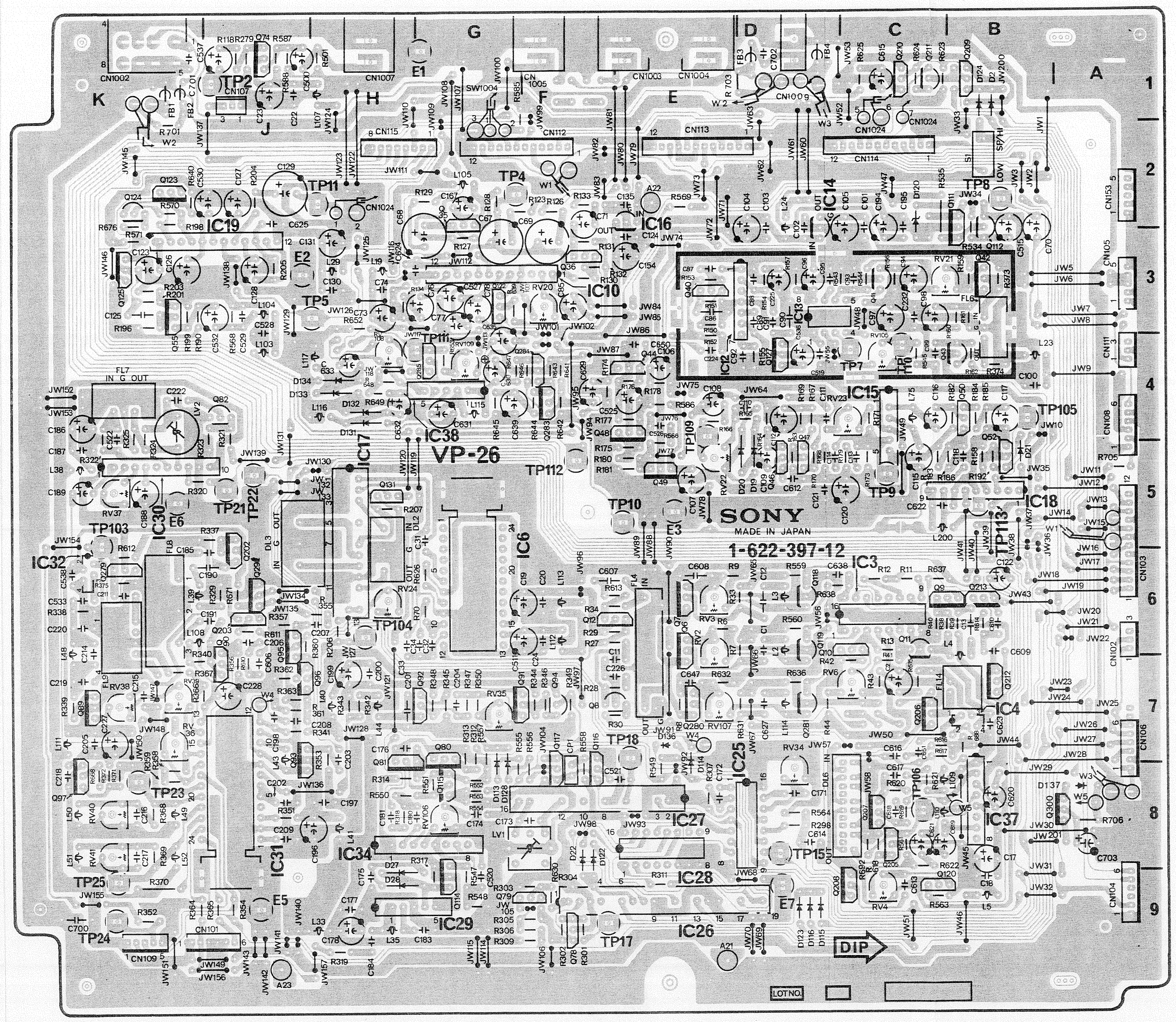
⑳ TP5 PB



VP-26;Y PB
EK;S/N 11051 and higher

VP-26 (1-622-397-12)

CN101	J-9
CN102	A-6
CN103	A-5
CN104	A-9
CN105	A-3
CN106	A-7
CN107	J-1
CN108	A-4
CN109	K-9
CN111	A-4
CN112	G-2
CN113	E-2
CN114	C-2
CN115	H-2
CN153	A-2
CN1002	K-1
CN1003	E-1
CN1004	E-1
CN1005	F-1
CN1007	H-1
CN1009	D-1
CP1	F-8
D2	B-1
D19	D-5
D20	D-5
D21	B-5
D22	F-8
D27	H-9
D28	H-9
D113	G-8
D114	E-7
D115	D-9
D116	D-9
D120	C-2
D122	F-8
D123	D-9
D124	B-1
D128	G-8
D131	H-4
D132	H-4
D133	H-4
D134	H-4
DL2	H-5
DL3	J-5
DL6	C-8
E1	G-1
E2	J-3
E3	E-5
E5	J-9
E6	K-5
E7	D-9
FL4	E-6
FL6	B-3
FL7	K-4
FL8	K-6
FL9	K-6
FL14	B-7
IC3	C-6
IC4	B-7
IC6	G-6
IC10	G-3
IC12	D-3
IC13	D-3
IC14	D-2
IC15	C-4
IC16	E-2
IC17	H-5
IC18	B-5
IC19	K-3
IC25	D-8
IC26	E-9
IC27	F-8
IC28	E-8
IC29	H-9
IC30	K-5
IC31	J-8
IC32	K-6
IC34	H-8
IC37	B-8
IC38	G-4
LV1	F-8
LV2	K-4
Q6	E-6
Q7	E-6
Q8	F-7
Q9	B-6
Q10	C-6
Q11	C-6
Q12	F-6
Q35	G-2
Q36	F-3
Q40	E-3
Q41	C-3
Q42	B-3
Q43	B-4
Q44	E-4
Q46	D-5
Q47	D-5
Q48	E-4
Q49	E-5
Q50	B-4
Q52	B-5
Q55	K-3
Q74	J-1
Q78	F-9
Q79	F-9
Q80	G-7
Q81	H-7
Q82	J-4
Q89	K-7
Q90	J-7
Q91	F-7
Q92	G-7
Q93	J-7
Q94	F-7
Q95	J-6
Q96	J-7
Q97	K-8
Q111	B-2
Q112	B-2
Q114	G-9
Q115	G-8
Q116	F-8
Q117	F-8
Q118	D-6
Q119	D-6
Q120	C-9
Q122	G-3
Q123	K-2
Q124	K-2
Q125	K-3
Q127	D-4
Q131	H-5
Q202	J-5
Q203	J-6
Q205	C-8
Q206	C-7
Q207	C-8
Q208	C-9
Q209	B-1
Q210	C-1
Q211	C-1
Q212	B-7
Q213	B-6
Q214	C-7
Q279	K-6
Q280	E-7
Q281	D-7
Q282	C-7
Q283	F-4
Q284	F-4
Q285	G-4
Q291	H-3
Q292	J-6
RV2	E-6
RV3	E-6
RV4	C-9
RV6	C-7
RV20	F-3
RV21	C-3
RV22	E-5
RV23	C-4
RV24	H-6
RV34	D-8
RV35	G-7
RV36	K-7
RV37	K-5
RV38	K-7
RV39	K-7
RV40	K-8
RV41	K-8
RV105	C-4
RV106	G-8
RV107	E-7
RV108	H-4
RV109	G-4
S1	B-2
TP2	J-1
TP4	G-2
TP5	H-3
TP7	C-4
TP8	B-2
TP9	C-5
TP10	E-5
TP11	H-2
TP15	D-8
TP17	F-9
TP18	E-7
TP21	J-5
TP22	J-5
TP23	K-8
TP24	K-9
TP25	K-9
TP103	K-5
TP104	H-6
TP105	B-4
TP106	C-8
TP109	E-4
TP110	C-4
TP111	H-4
TP112	F-5


K
J
H
G
F
E
D
C
B
A
1
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5
6
7
8
9
VP-26
SONY
MADE IN JAPAN
1-622-397-12
IC3
IC4
IC6
IC10
IC12
IC13
IC14
IC15
IC16
IC17
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IC25
IC26
IC27
IC28
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IC31
IC32
IC34
IC37
IC38
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TP23
TP24
TP25
TP103
TP104
TP105
TP106
TP109
TP110
TP111
TP112
TP113
CN101
CN102
CN103
CN104
CN105
CN106
CN107
CN108
CN109
CN111
CN112
CN113
CN114
CN115
CN153
CN1002
CN1003
CN1004
CN1005
CN1007
CN1009
CN1024
E1
E2
E3
E5
E6
E7
DIP
LOT NO.

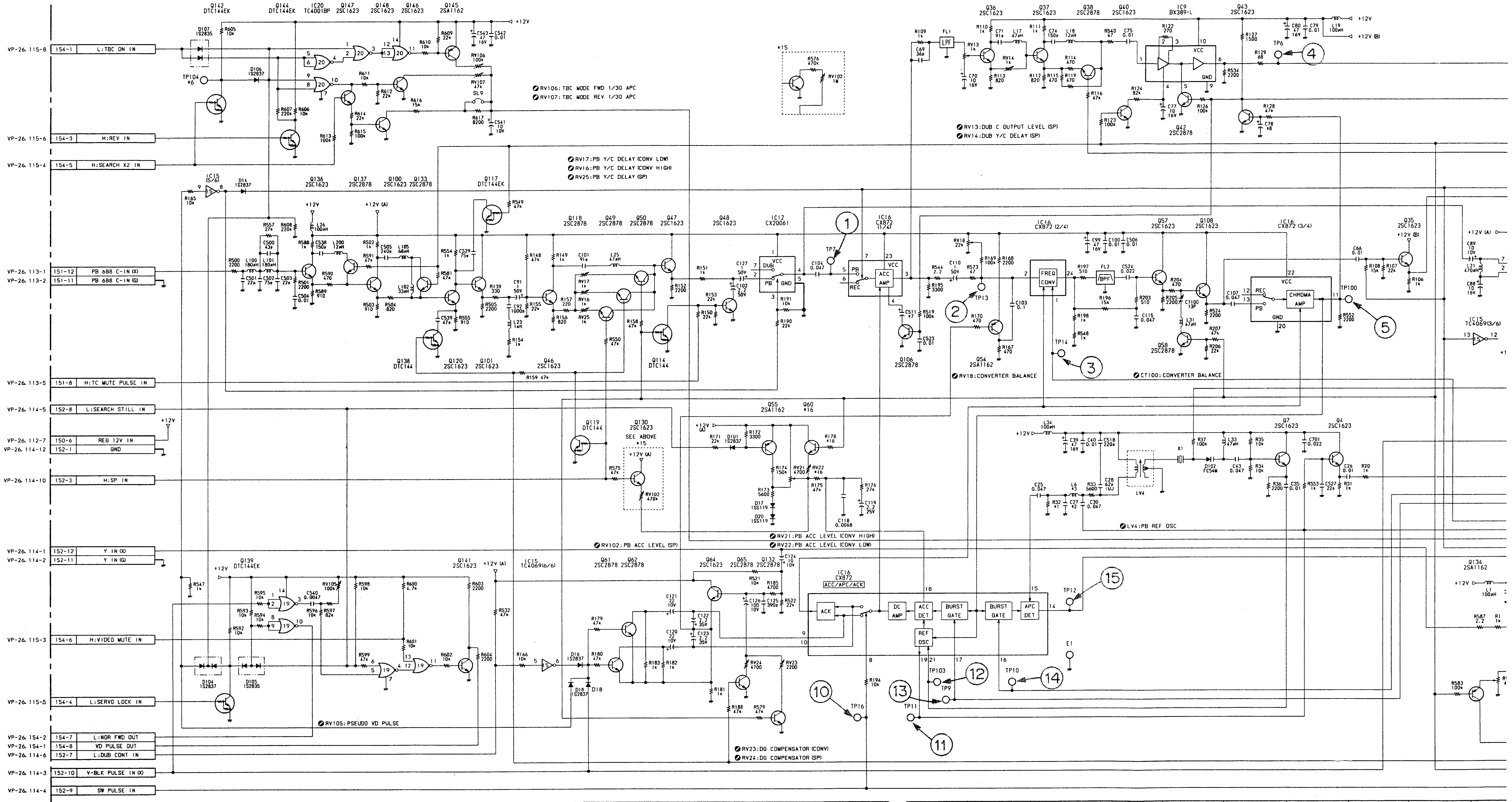
VP-26

-COMPONENT SIDE-

1-622-397-12

VP-9000P

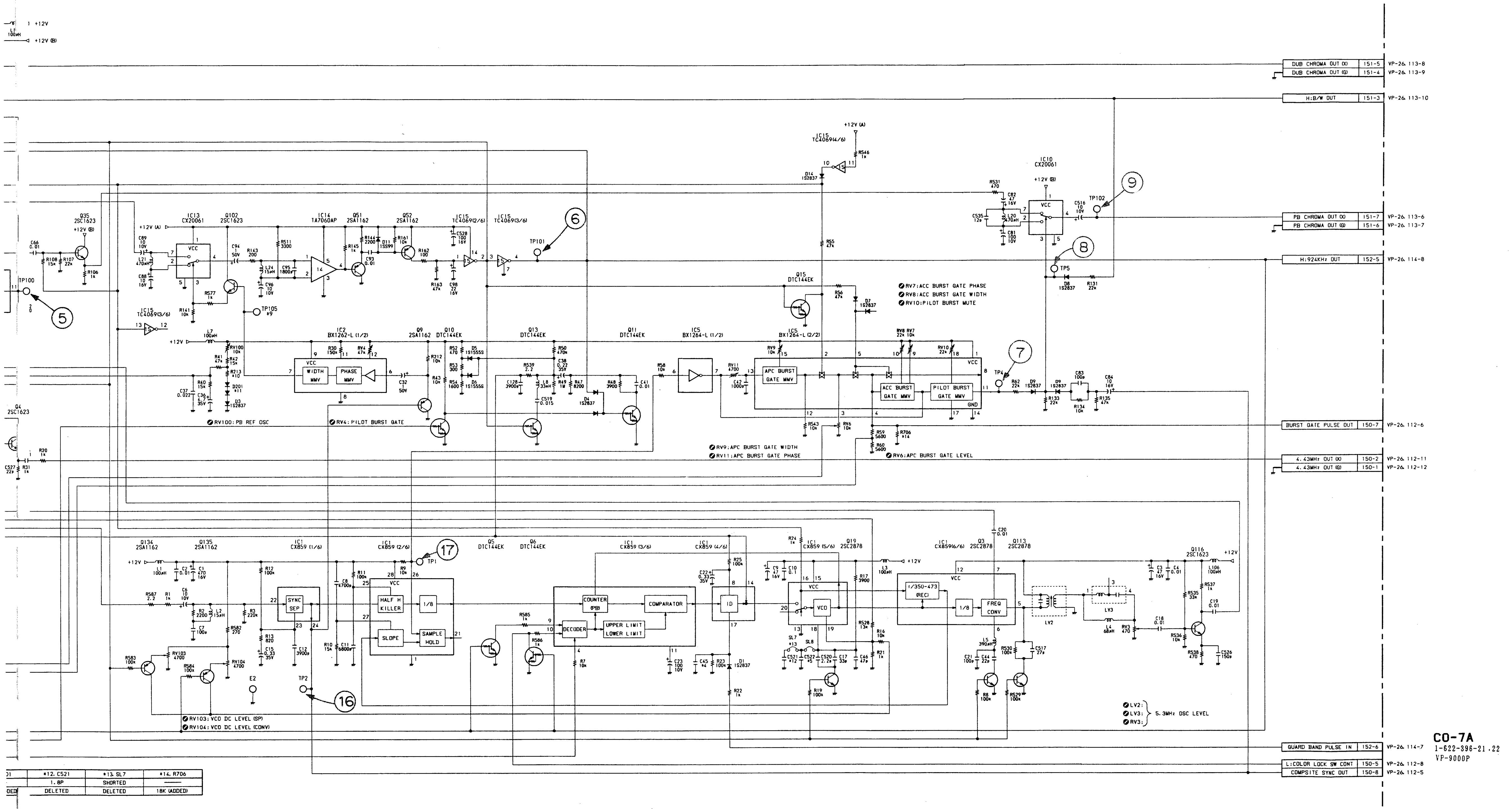
CO-7A ; COLOR PB
EK ; S/N 10001 and higher


VP-26, 115-8 154-1 L:TBC ON IN
VP-26, 115-6 154-3 H:REV IN
VP-26, 115-4 154-5 H:SEARCH X2 IN
VP-26, 113-1 151-12 PB 688 C-IN (X)
VP-26, 113-2 151-11 PB 688 C-IN (G)
VP-26, 113-5 151-8 H:TC MUTE PULSE IN
VP-26, 114-5 152-8 L:SEARCH STILL IN
VP-26, 112-7 150-6 REG 12V IN
VP-26, 114-12 152-1 GND
VP-26, 114-10 152-3 H:SP IN
VP-26, 114-1 152-12 Y IN (X)
VP-26, 114-2 152-11 Y IN (G)
VP-26, 115-3 154-6 H:VIDEO MUTE IN
VP-26, 115-5 154-4 L:SERVO LOCK IN
VP-26, 154-2 154-7 L:NOR FWD OUT
VP-26, 154-1 154-8 VD PULSE OUT
VP-26, 114-6 152-7 L:DUB CONT IN
VP-26, 114-3 152-10 V-BLK PULSE IN (X)
VP-26, 114-4 152-9 SW PULSE IN
RV106: TBC MODE FWD 1/30 APC
RV107: TBC MODE REV 1/30 APC
RV17: PB Y/C DELAY (CONV LOW)
RV16: PB Y/C DELAY (CONV HIGH)
RV25: PB Y/C DELAY (SP)
RV13: DUB C OUTPUT LEVEL (SP)
RV14: DUB Y/C DELAY (SP)
RV18: CONVERTER BALANCE
CT100: CONVERTER BALANCE
RV102: PB ACC LEVEL (SP)
RV21: PB ACC LEVEL (CONV HIGH)
RV22: PB ACC LEVEL (CONV LOW)
LV4: PB REF OSC
RV105: PSEUDO VD PULSE
RV23: DG COMPENSATOR (CONV)
RV24: DG COMPENSATOR (SP)
IC12 CX20061
IC16 CX872 (1/4)
IC16 CX872 (2/4)
IC16 CX872 (3/4)
IC16 CX872 ACC/APC/ACK
IC9 BX389-L
IC15 TC4069
IC20 TC4001BP
FREQ CONV
CHROMA AMP
ACC AMP
ACK
DC AMP
ACC DET
BURST GATE
APC DET
REF OSC
+12V
①
②
③
④
⑤
⑩
⑪
⑫
⑬
⑭
⑮

S/N	*15	*16. Q60. R178. RV22 (Q60. 2SC1623 R178. 47K RV22. 220K)
10001~11450	CIRCUIT CHANGE (SEE ABOVE)	———
11451~		THESE PARTS ARE DELETED

S/N	*1 R32	*2. C27	*3. L6	*4. C45	*5. C522
10001~10750	1500	24P	33μH	1000P	3. 3P
10751~	680	DELETED	15μH	0. 0033	3. 9P

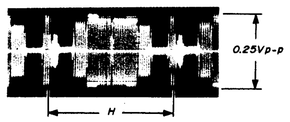
S/N	*6. TP104	*7. C511	*8. C78	*9. TP105	*10. R213	*11. D201	*12. C521	*13. SL7	*14. R
10001~11050	———	0. 1 (NONPOLAR)	1/50	———	39K	———	1. 8P	SHORTED	——
11051~	ADDED	1/35	47/10	ADDED	33K	1SS123 (ADDED)	DELETED	DELETED	18K (AD


1 +12V
L1 100μH
+12V (B)
Q35 2SC1623
TP100
⑤
IC13 CX20061
Q102 2SC1623
IC14 TA7060AP
Q51 2SA1162
Q52 2SA1162
IC15 TC4069(2/6)
IC15 TC4069(3/6)
TP101
⑥
TP105 *9
IC2 BX1262-L (1/2)
WIDTH MMV
PHASE MMV
Q9 2SA1162
Q10 DTC144EK
Q13 DTC144EK
Q11 DTC144EK
IC5 BX1264-L (1/2)
IC5 BX1264-L (2/2)
APC BURST GATE MMV
ACC BURST GATE MMV
PILOT BURST GATE MMV
VCC
GND
Q15 DTC144EK
+12V (A)
IC15 TC4069(4/6)
D14 1S2837
IC10 CX20061
TP102
⑨
⑧
TP5
TP4
⑦
RV100: PB REF OSC
RV4: PILOT BURST GATE
RV7: ACC BURST GATE PHASE
RV8: ACC BURST GATE WIDTH
RV10: PILOT BURST MUTE
RV9: APC BURST GATE WIDTH
RV11: APC BURST GATE PHASE
RV6: APC BURST GATE LEVEL
Q4 2SC1623
Q134 2SA1162
Q135 2SA1162
IC1 CX859 (1/6)
SYNC SEP
IC1 CX859 (2/6)
HALF H KILLER
1/8
SLOPE
SAMPLE HOLD
TP1
⑰
TP2
⑯
E2
Q5 DTC144EK
Q6 DTC144EK
IC1 CX859 (3/6)
COUNTER (PB)
COMPARATOR
DECODER
UPPER LIMIT
LOWER LIMIT
IC1 CX859 (4/6)
ID
IC1 CX859 (5/6)
Q19 2SC2878
VCO
SL7 *13
SL8
IC1 CX859(6/6)
Q3 2SC2878
Q113 2SC2878
f/350-473 (REC)
FREQ CONV
LV2
LV3
Q116 2SC1623
RV103; VCO DC LEVEL (SP)
RV104; VCO DC LEVEL (CONV)
LV2;
LV3; } 5.3MHz OSC LEVEL
RV3;
DUB CHROMA OUT (X) | 151-5 | VP-26, 113-8
DUB CHROMA OUT (G) | 151-4 | VP-26, 113-9
H:B/W OUT | 151-3 | VP-26, 113-10
PB CHROMA OUT (X) | 151-7 | VP-26, 113-6
PB CHROMA OUT (G) | 151-6 | VP-26, 113-7
H:924KHz OUT | 152-5 | VP-26, 114-8
BURST GATE PULSE OUT | 150-7 | VP-26, 112-6
4.43MHz OUT (X) | 150-2 | VP-26, 112-11
4.43MHz OUT (G) | 150-1 | VP-26, 112-12
GUARD BAND PULSE IN | 152-6 | VP-26, 114-7
L:COLOR LOCK SW CONT | 150-5 | VP-26, 112-8
COMPSITE SYNC OUT | 150-8 | VP-26, 112-5

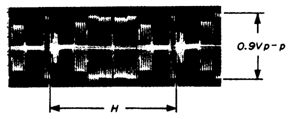
1	*12. C521	*13. SL7	*14. R706
	1.8P	SHORTED	——
DED	DELETED	DELETED	18K (ADDED)

CO-7A
1-622-396-21, 22
VP-9000P

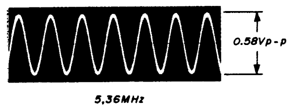
① TP7
PB



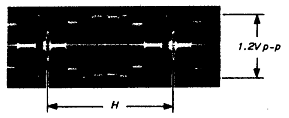
② TP13
PB



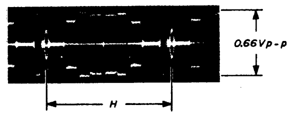
③ TP14
PB



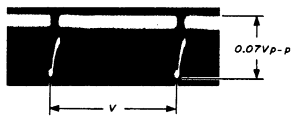
④ TP6
PB



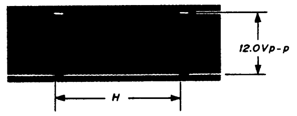
⑤ TP100
PB



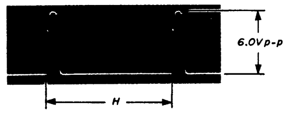
⑥ TP101
PB



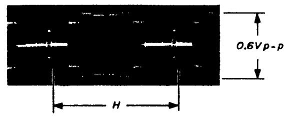
⑦ TP4
PB



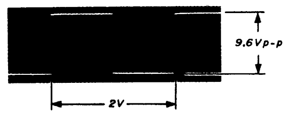
⑧ TP5
PB



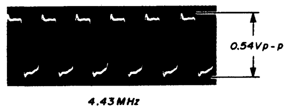
⑨ TP102
PB



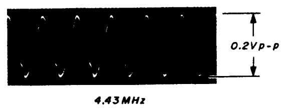
⑩ TP16
PB



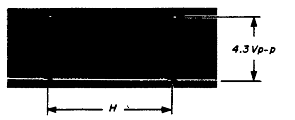
⑪ TP11
PB



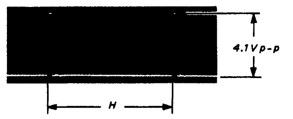
⑫ TP103
PB



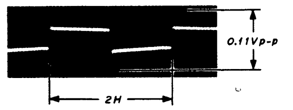
⑬ TP9
PB



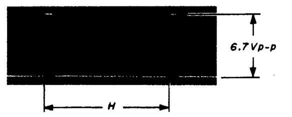
⑭ TP10
PB



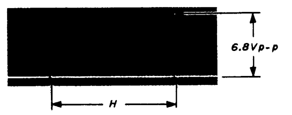
⑮ TP12
PB



⑯ TP2
PB



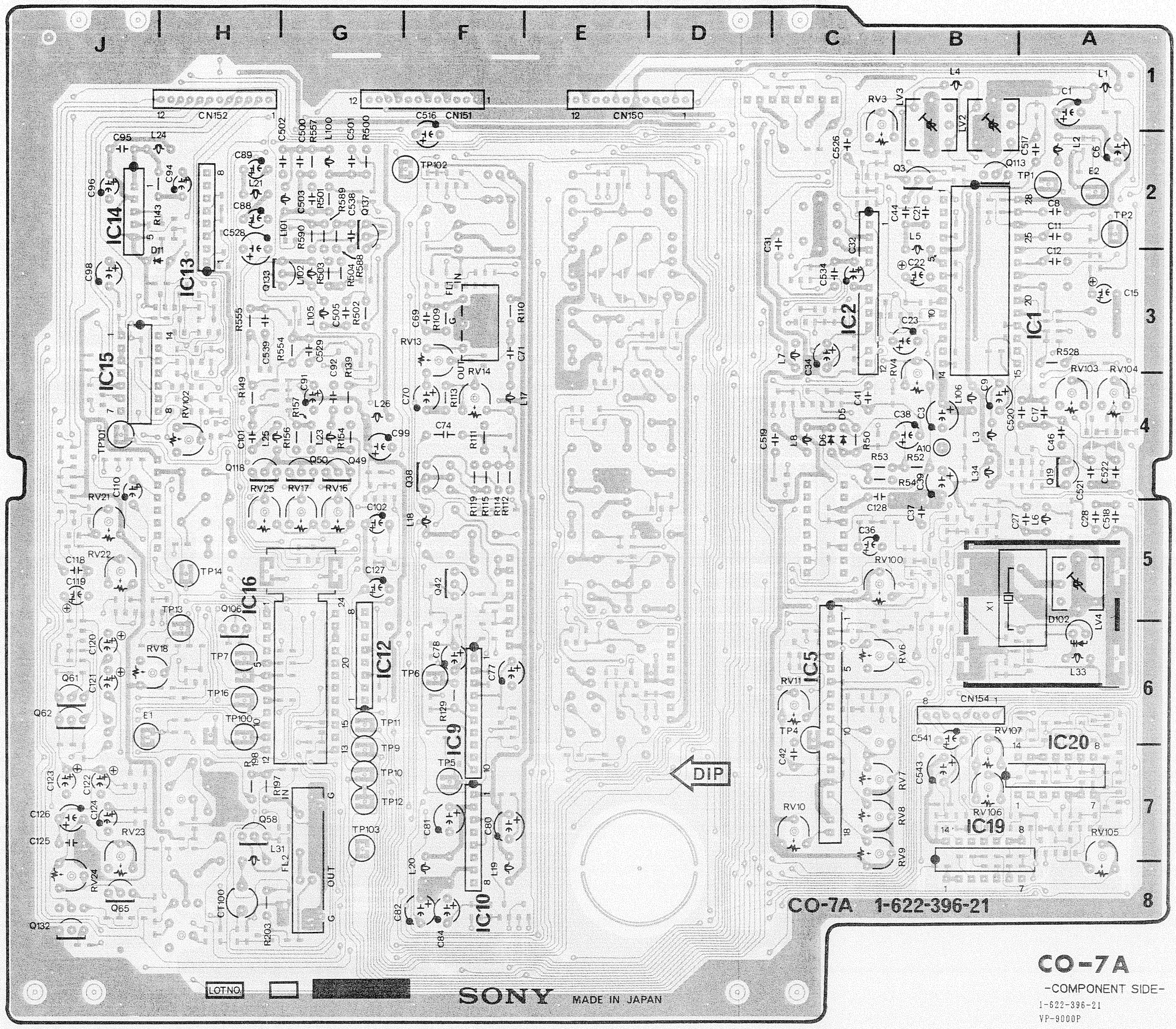
⑰ TP1
PB



CO-7A; COLOR PB
EK; S/N 10001 thru 11050

CO-7A (1-622-396-21)

CN150	E-1
CN151	F-1
CN152	H-1
CN154	B-6
D5	C-4
D6	C-4
D11	J-3
D102	A-6
E1	J-6
E2	A-2
FL1	F-3
FL2	G-7
IC1	B-3
IC2	C-3
IC5	C-6
IC9	F-6
IC10	F-7
IC12	G-6
IC13	H-2
IC14	J-2
IC15	J-3
IC16	G-6
IC19	B-7
IC20	A-7
LV2	B-1
LV3	B-1
LV4	A-5
Q3	B-2
Q19	A-4
Q38	F-4
Q42	F-5
Q49	G-4
Q50	G-5
Q58	H-7
Q61	J-6
Q62	J-6
Q65	J-8
Q106	H-6
Q113	B-2
Q118	H-4
Q132	J-8
Q133	G-3
Q137	G-2
RV3	C-1
RV4	B-4
RV6	C-6
RV7	C-7
RV8	C-7
RV9	C-7
RV10	C-7
RV11	C-6
RV13	F-3
RV14	F-4
RV16	G-5
RV17	G-5
RV18	J-6
RV21	J-5
RV22	J-5
RV23	J-8
RV24	J-8
RV25	H-5
RV100	C-5
RV102	H-4
RV103	A-4
RV104	A-4
RV105	A-7
RV106	B-7
RV107	B-7
TP1	A-2
TP2	A-2
TP4	C-6
TP5	F-7
TP6	F-6
TP7	H-6
TP9	G-7
TP10	G-7
TP11	G-6
TP12	G-7
TP13	H-6
TP14	H-5
TP16	H-6
TP100	H-6
TP101	J-4
TP102	G-2
TP107	G-7
X1	A-5


J
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
CN152
CN151
CN150
CN154
IC1
IC2
IC5
IC9
IC10
IC12
IC13
IC14
IC15
IC16
IC19
IC20
DIP
CO-7A 1-622-396-21
LOT NO.
SONY
MADE IN JAPAN

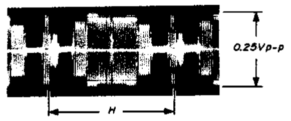
CO-7A

-COMPONENT SIDE-

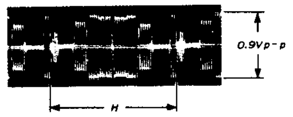
1-622-396-21

VP-9000P

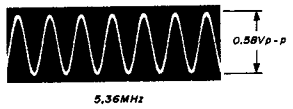
① TP7 PB



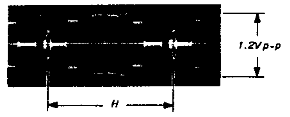
② TP13 PB



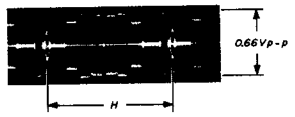
③ TP14 PB



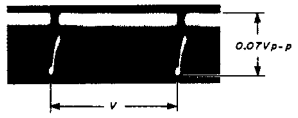
④ TP6 PB



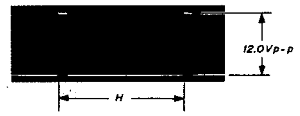
⑤ TP100 PB



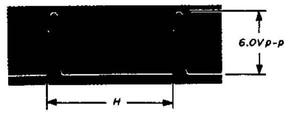
⑥ TP101 PB



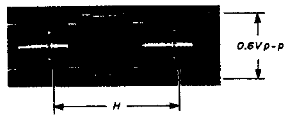
⑦ TP4 PB



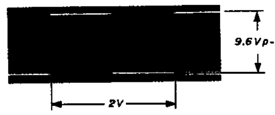
⑧ TP5 PB



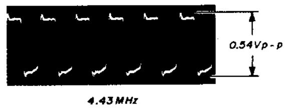
⑨ TP102 PB



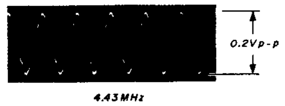
⑩ TP16 PB



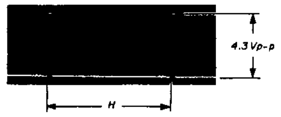
⑪ TP11 PB



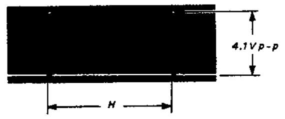
⑫ TP103 PB



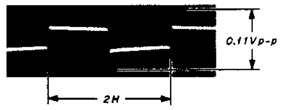
⑬ TP9 PB



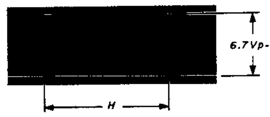
⑭ TP10 PB



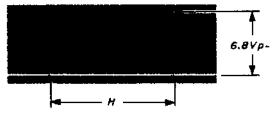
⑮ TP12 PB



⑯ TP2 PB



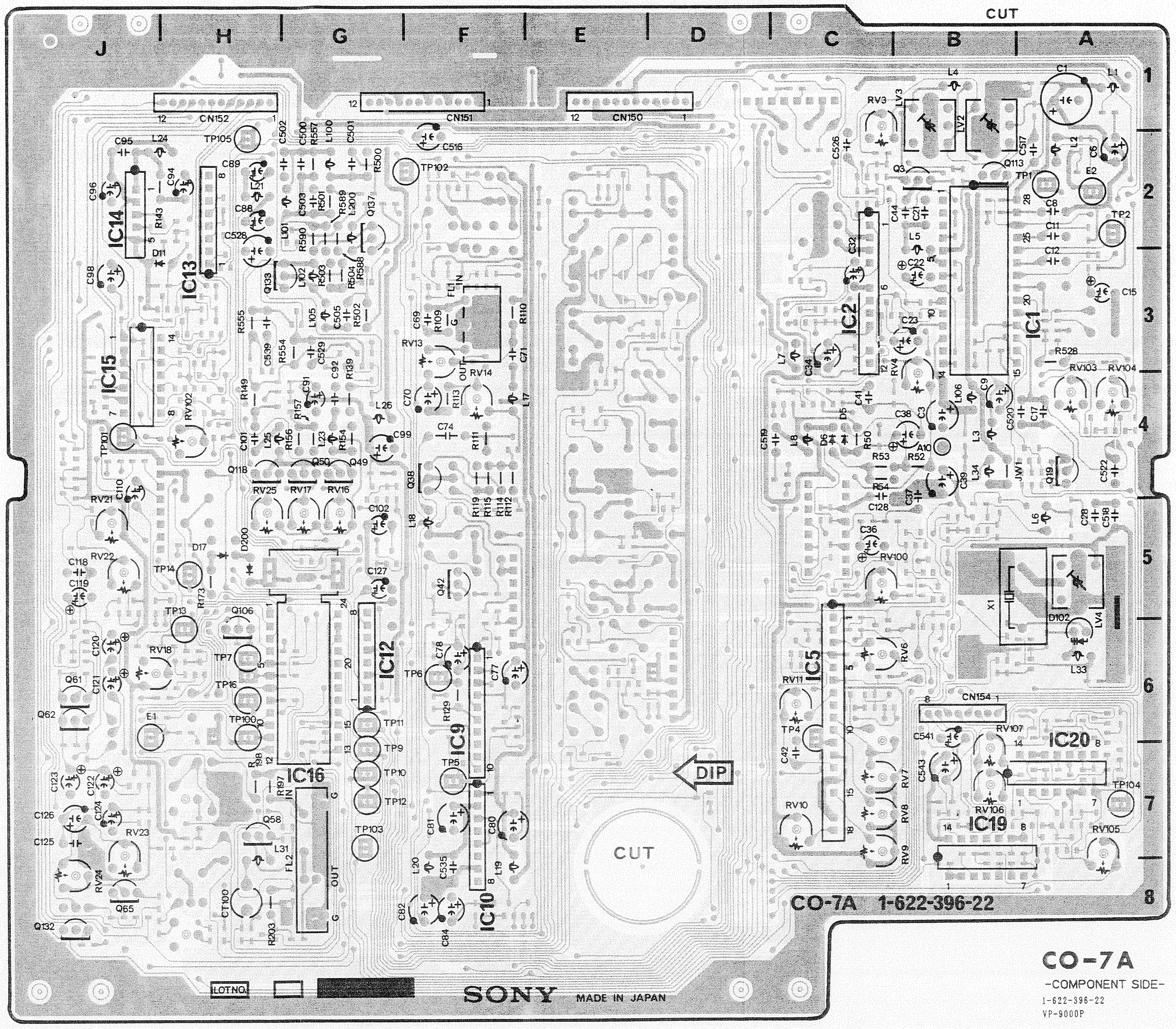
⑰ TP1 PB



CO-7A; COLOR PB
EK; S/N 11051 and higher

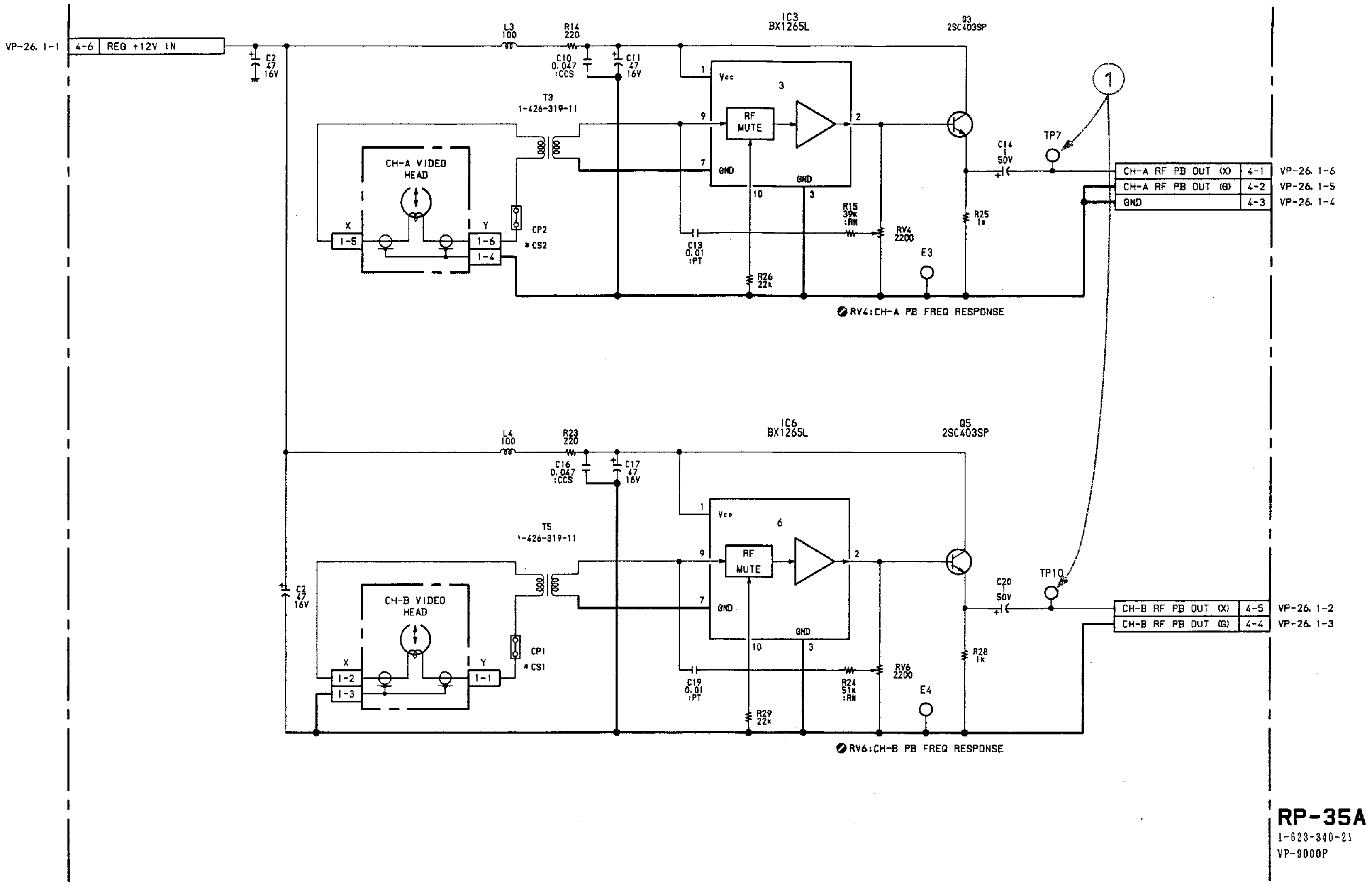
CO-7A (1-622-396-22)

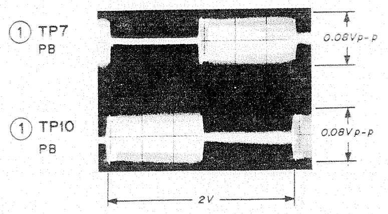
CN150	E-1
CN151	F-1
CN152	H-1
CN154	B-6
D5	C-5
D6	C-5
D11	J-3
D17	H-5
D102	A-6
D200	H-5
E1	J-6
E2	A-2
FL1	F-3
FL2	G-7
IC1	B-3
IC2	C-3
IC5	C-6
IC9	F-6
IC10	F-7
IC12	G-6
IC13	H-2
IC14	J-2
IC15	J-3
IC16	G-6
IC19	B-7
IC20	A-7
LV2	B-1
LV3	B-1
LV4	A-4
Q3	B-2
Q19	A-4
Q38	F-4
Q42	F-5
Q49	G-4
Q50	G-4
Q58	H-7
Q61	J-6
Q62	J-6
Q65	J-8
Q106	H-5
Q113	B-2
Q118	H-4
Q132	J-8
Q133	G-3
Q137	G-2
RV3	C-2
RV4	B-4
RV6	C-6
RV7	C-7
RV8	C-7
RV9	C-7
RV10	C-7
RV11	C-6
RV13	F-3
RV14	F-4
RV16	G-5
RV17	G-5
RV18	J-6
RV21	J-5
RV22	J-5
RV23	J-8
RV24	J-8
RV25	H-5
RV100	C-5
RV102	H-4
RV103	A-4
RV104	A-4
RV105	A-7
RV106	B-7
RV107	B-7
TP1	A-2
TP2	A-2
TP4	C-6
TP5	F-7
TP6	F-6
TP7	H-6
TP9	G-6
TP10	G-7
TP11	G-6
TP12	G-7
TP13	H-5
TP14	H-5
TP16	H-6
TP100	H-6
TP101	J-4
TP102	G-2
TP103	G-7
TP104	A-7
TP105	H-2
X1	A-5


CUT
J
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
CN152
CN151
CN150
CN154
IC1
IC2
IC5
IC9
IC10
IC12
IC13
IC14
IC15
IC16
IC19
IC20
TP1
TP2
TP4
TP5
TP6
TP7
TP9
TP10
TP11
TP12
TP13
TP14
TP16
TP100
TP101
TP102
TP103
TP104
TP105
RV3
RV4
RV6
RV7
RV8
RV9
RV10
RV11
RV13
RV14
RV16
RV17
RV18
RV21
RV22
RV23
RV24
RV25
RV100
RV102
RV103
RV104
RV105
RV106
RV107
LV2
LV3
LV4
X1
D102
L33
E1
E2
Q3
Q113
Q118
Q50
Q49
Q106
Q61
Q62
Q65
Q132
Q58
Q42
Q38
Q19
Q137
Q133
D11
D17
D200
FL1
FL2
CT100
R203
L31
IN
OUT
G
DIP
CUT
CO-7A 1-622-396-22
LOT NO.
SONY
MADE IN JAPAN

CO-7A
-COMPONENT SIDE-
1-622-396-22
VP-9000P

RP-35A; PB AMPLIFIER
EK; S/N 10001 and higher

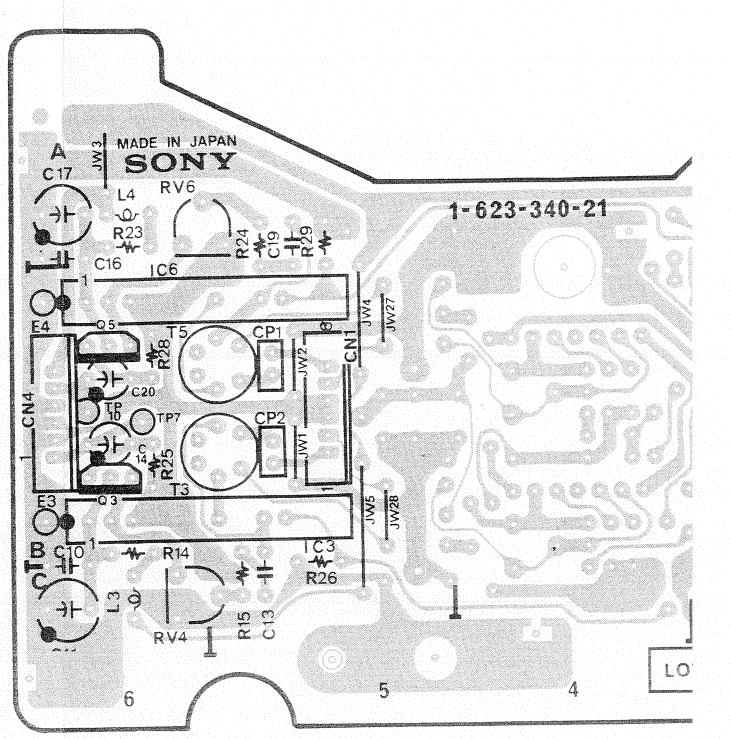

VP-26. 1-1
4-6
REG +12V IN
C2
47
16V
L3
100
R14
220
C10
0.047
:CCS
C11
47
16V
T3
1-426-319-11
IC3
BX1265L
Vcc
3
RF
MUTE
GND
1
9
7
2
10
3
Q3
2SC403SP
CH-A VIDEO
HEAD
X
1-5
Y
1-6
1-4
CP2
* CS2
C13
0.01
:PT
R26
22k
R15
39k
:RN
RV4
2200
E3
R25
1k
C14
1
50V
TP7
1
CH-A RF PB OUT (X)
4-1
VP-26. 1-6
CH-A RF PB OUT (G)
4-2
VP-26. 1-5
GND
4-3
VP-26. 1-4
RV4:CH-A PB FREQ RESPONSE
L4
100
R23
220
C16
0.047
:CCS
C17
47
16V
T5
1-426-319-11
IC6
BX1265L
Vcc
6
RF
MUTE
GND
Q5
2SC403SP
C2
47
16V
CH-B VIDEO
HEAD
X
1-2
1-3
Y
1-1
CP1
* CS1
C19
0.01
:PT
R29
22k
R24
51k
:RN
RV6
2200
E4
R28
1k
C20
1
50V
TP10
CH-B RF PB OUT (X)
4-5
VP-26. 1-2
CH-B RF PB OUT (G)
4-4
VP-26. 1-3
RV6:CH-B PB FREQ RESPONSE
RP-35A
1-623-340-21
VP-9000P

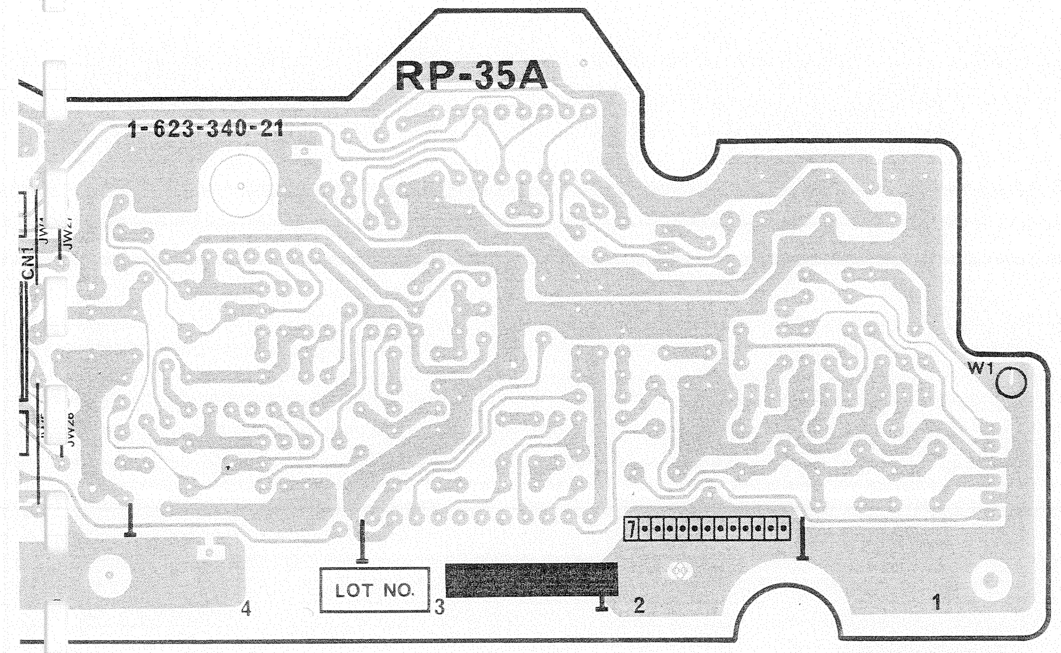


RP-35A ; PB AMPLIFIER
EK ; S/N 10001 and higher

RP-35A (1-623-340-21)

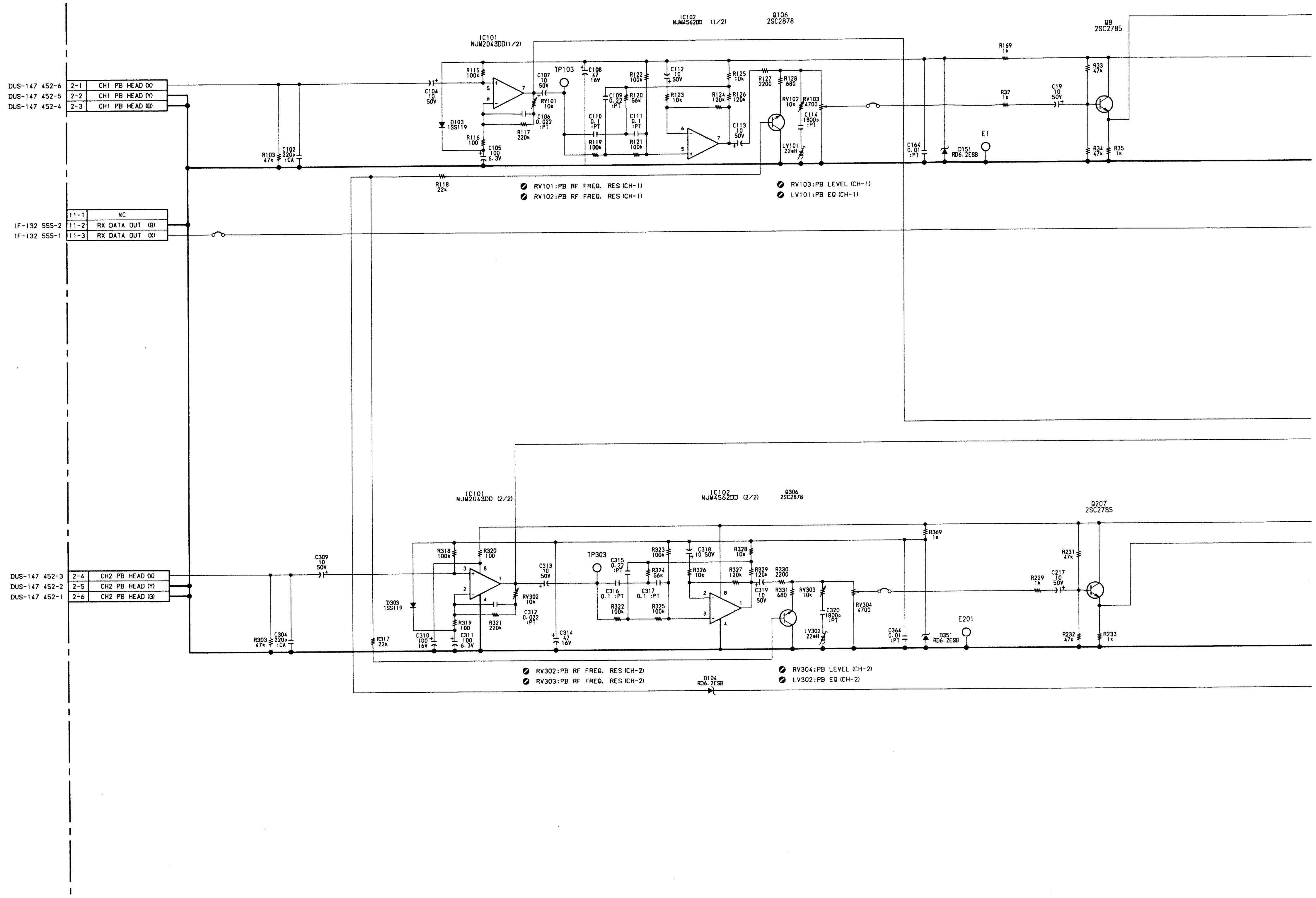
CN1	B-5
CN4	B-6
CP1	B-5
CP2	B-5
E3	B-6
E4	B-6
IC3	B-6
IC6	B-6
Q3	B-6
Q5	B-6
RV4	C-6
RV6	A-6
T3	B-5
T5	B-5
TP7	B-6
TP17	B-6

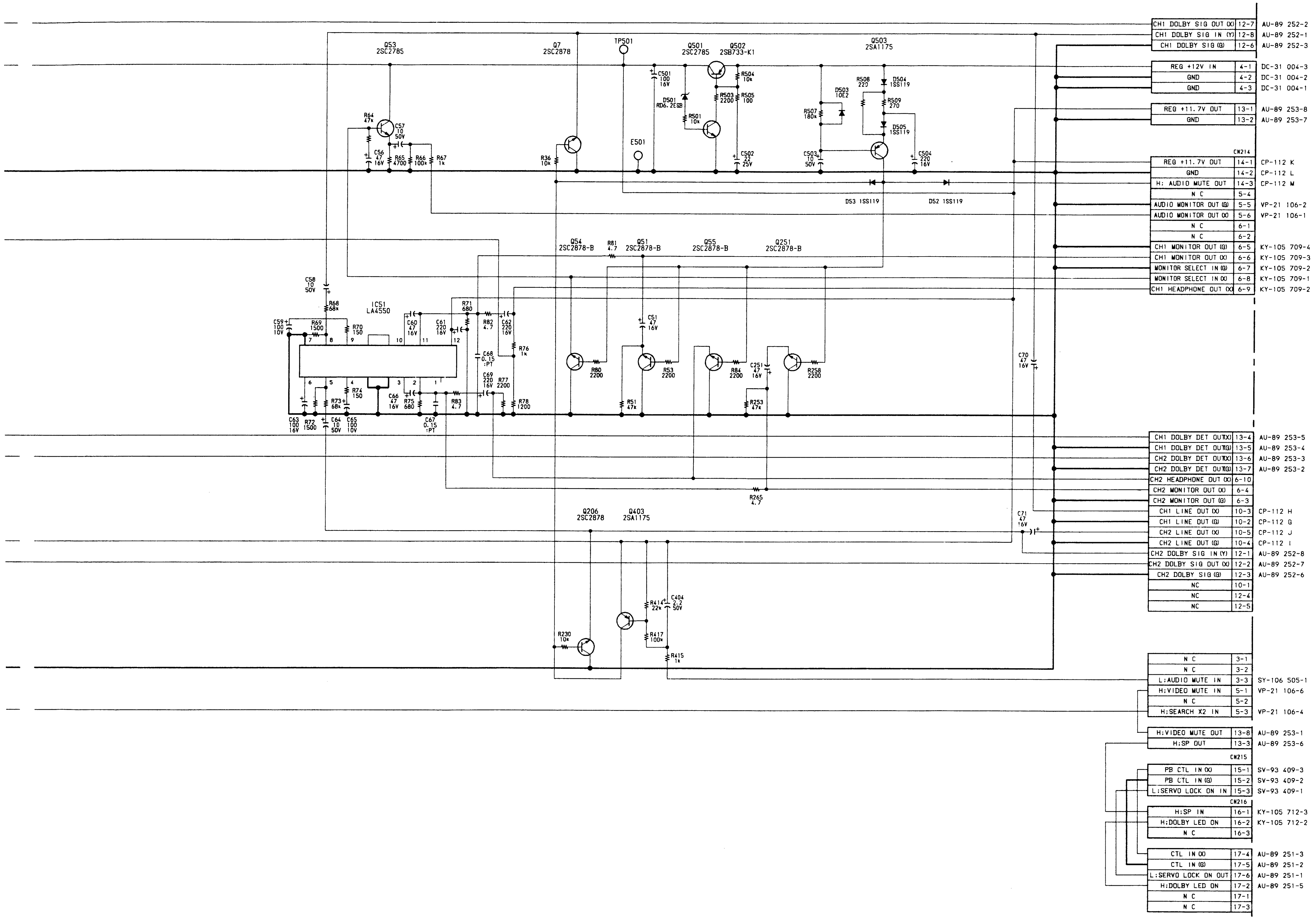

A
B
C
MADE IN JAPAN
SONY
1-623-340-21
JW3
C17
L4
RV6
R23
R24
C19
R29
C16
IC6
JW4
JW27
E4
Q5
T5
CP1
R28
JW2
CN1
C20
CN4
TP 10
TP7
CP2
C 14
R25
JW1
T3
E3
Q3
JW5
JW28
C10
R14
IC3
R26
L3
RV4
R15
C13
6
5
4
LO


RP-35A
1-623-340-21
CN1
W1
7
LOT NO.
1
2
3
4

RP-35A
-COMPONENT SIDE-
1-623-340-21
VP-9000P

AU-82A ; PB AMPLIFIER
EK ; S/N 10001 and higher


DUS-147 452-6
DUS-147 452-5
DUS-147 452-4
2-1 CH1 PB HEAD (X)
2-2 CH1 PB HEAD (Y)
2-3 CH1 PB HEAD (G)
IF-132 555-2
IF-132 555-1
11-1 NC
11-2 RX DATA OUT (G)
11-3 RX DATA OUT (X)
DUS-147 452-3
DUS-147 452-2
DUS-147 452-1
2-4 CH2 PB HEAD (X)
2-5 CH2 PB HEAD (Y)
2-6 CH2 PB HEAD (G)
IC101 NJM2043DD(1/2)
IC102 NJM4562DD (1/2)
Q106 2SC2878
Q8 2SC2785
IC101 NJM2043DD (2/2)
IC102 NJM4562DD (2/2)
Q306 2SC2878
Q207 2SC2785
TP103
TP303
E1
E201
D103 1SS119
D303 1SS119
D151 RD6.2ESB
D351 RD6.2ESB
D104 RD6.2ESB
RV101:PB RF FREQ. RES (CH-1)
RV102:PB RF FREQ. RES (CH-1)
RV103:PB LEVEL (CH-1)
LV101:PB EQ (CH-1)
RV302:PB RF FREQ. RES (CH-2)
RV303:PB RF FREQ. RES (CH-2)
RV304:PB LEVEL (CH-2)
LV302:PB EQ (CH-2)


Q53
2SC2785
R64 47k
C57 10 50V
C56 47 16V
R65 4700
R66 100k
R67 1k
Q7
2SC2878
R36 10k
TP501
E501
Q501
2SC2785
Q502
2SB733-K1
C501 100 16V
D501 RD6.2ESB
R501 10k
R503 2200
R504 10k
R505 100
C502 22 25V
Q503
2SA1175
R507 180k
D503 10E2
R508 220
D504 1SS119
R509 270
D505 1SS119
C503 10 50V
C504 220 16V
D53 1SS119
D52 1SS119
C58 10 50V
R68 68k
IC51
LA4550
C59 100 10V
R69 1500
R70 150
C60 47 16V
C61 220 16V
R71 680
R82 4.7
C62 220 16V
R76 1k
C68 0.15 :PT
C69 220 16V
R77 2200
R78 1200
R83 4.7
C66 47 16V
R75 680
C67 0.15 :PT
R74 150
R73 68k
C63 100 16V
R72 1500
C64 10 50V
C65 100 10V
Q54
2SC2878-B
R81 4.7
Q51
2SC2878-B
Q55
2SC2878-B
Q251
2SC2878-B
C51 47 16V
R80 2200
R51 47k
R53 2200
R84 2200
C251 47 16V
R253 47k
R258 2200
R265 4.7
C70 47 16V
C71 47 16V
Q206
2SC2878
Q403
2SA1175
R414 22k
C404 2.2 50V
R417 100k
R415 1k
R230 10k
CN214
CN215
CN216

CH1 DOLBY SIG OUT (X)	12-7	AU-89 252-2
CH1 DOLBY SIG IN (Y)	12-8	AU-89 252-1
CH1 DOLBY SIG (G)	12-6	AU-89 252-3
REG +12V IN	4-1	DC-31 004-3
GND	4-2	DC-31 004-2
GND	4-3	DC-31 004-1
REG +11.7V OUT	13-1	AU-89 253-8
GND	13-2	AU-89 253-7
REG +11.7V OUT	14-1	CP-112 K
GND	14-2	CP-112 L
H: AUDIO MUTE OUT	14-3	CP-112 M
N C	5-4	
AUDIO MONITOR OUT (G)	5-5	VP-21 106-2
AUDIO MONITOR OUT (X)	5-6	VP-21 106-1
N C	6-1	
N C	6-2	
CH1 MONITOR OUT (G)	6-5	KY-105 709-4
CH1 MONITOR OUT (X)	6-6	KY-105 709-3
MONITOR SELECT IN (G)	6-7	KY-105 709-2
MONITOR SELECT IN (X)	6-8	KY-105 709-1
CH1 HEADPHONE OUT (X)	6-9	KY-105 709-2

CH1 DOLBY DET OUT(X)	13-4	AU-89 253-5
CH1 DOLBY DET OUT(G)	13-5	AU-89 253-4
CH2 DOLBY DET OUT(X)	13-6	AU-89 253-3
CH2 DOLBY DET OUT(G)	13-7	AU-89 253-2
CH2 HEADPHONE OUT (X)	6-10	
CH2 MONITOR OUT (X)	6-4	
CH2 MONITOR OUT (G)	6-3	
CH1 LINE OUT (X)	10-3	CP-112 H
CH1 LINE OUT (G)	10-2	CP-112 G
CH2 LINE OUT (X)	10-5	CP-112 J
CH2 LINE OUT (G)	10-4	CP-112 I
CH2 DOLBY SIG IN (Y)	12-1	AU-89 252-8
CH2 DOLBY SIG OUT (X)	12-2	AU-89 252-7
CH2 DOLBY SIG (G)	12-3	AU-89 252-6
NC	10-1	
NC	12-4	
NC	12-5	

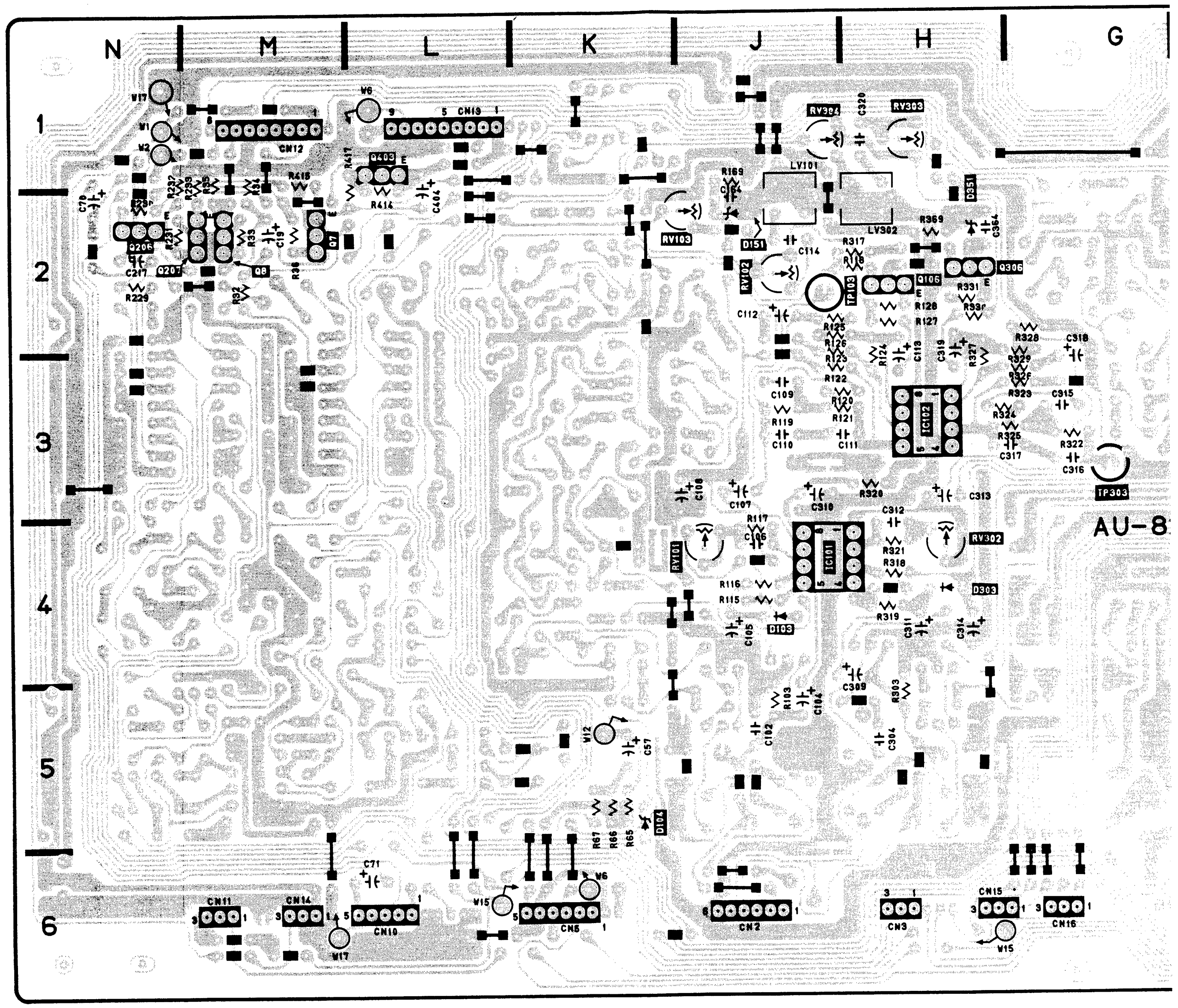
N C	3-1	
N C	3-2	
L:AUDIO MUTE IN	3-3	SY-106 505-1
H:VIDEO MUTE IN	5-1	VP-21 106-6
N C	5-2	
H:SEARCH X2 IN	5-3	VP-21 106-4
H:VIDEO MUTE OUT	13-8	AU-89 253-1
H:SP OUT	13-3	AU-89 253-6
PB CTL IN (X)	15-1	SV-93 409-3
PB CTL IN (G)	15-2	SV-93 409-2
L:SERVO LOCK ON IN	15-3	SV-93 409-1
H:SP IN	16-1	KY-105 712-3
H:DOLBY LED ON	16-2	KY-105 712-2
N C	16-3	
CTL IN (X)	17-4	AU-89 251-3
CTL IN (G)	17-5	AU-89 251-2
L:SERVO LOCK ON OUT	17-6	AU-89 251-1
H:DOLBY LED ON	17-2	AU-89 251-5
N C	17-1	
N C	17-3	

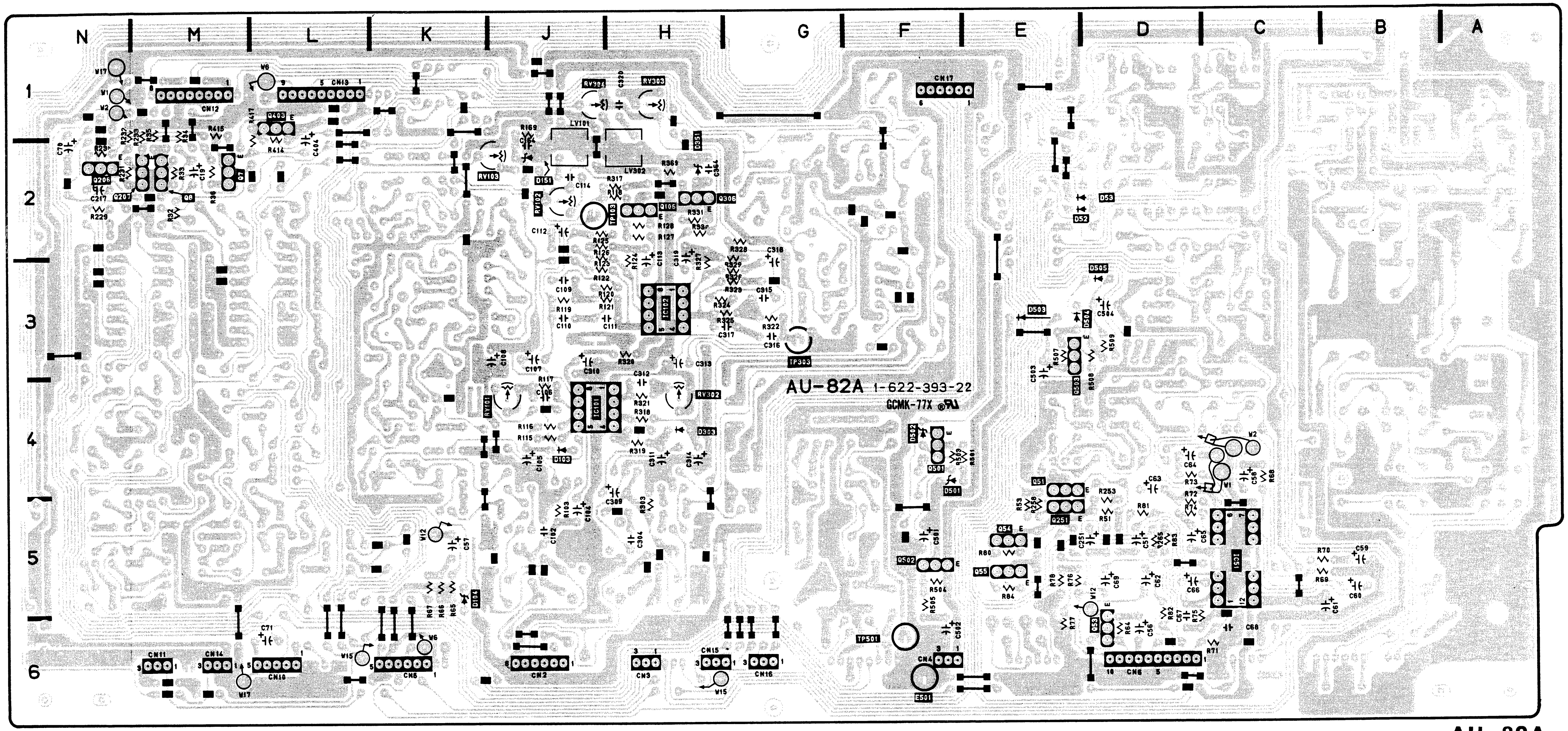
AU-82A
1-622-393-22.23
VP-9000
VP-9000P

AU-82A ; PB AMPLIFIER
EK ; S/N 10001 thru 10750

AU-82A (1-622-393-22)

CN2	J-6
CN3	H-6
CN4	F-6
CN5	K-6
CN6	D-6
CN10	L-6
CN11	M-6
CN12	M-1
CN13	L-1
CN14	M-6
CN15	H-6
CN16	G-6
CN17	F-1
D52	D-2
D53	D-2
D103	J-4
D104	K-5
D151	J-2
D303	H-4
D351	H-2
D501	F-4
D502	F-4
D503	E-3
D504	E-3
D505	D-3
E 501	F-6
IC51	C-5
IC101	J-4
IC102	H-3
LV101	J-2
LV301	H-5
LV302	H-2
Q7	M-2
Q8	M-2
Q51	E-4
Q53	D-6
Q54	E-5
Q55	E-5
Q106	H-2
Q206	N-2
Q207	M-2
Q208	M-4
Q251	E-5
Q306	H-2
Q403	L-1
Q501	F-4
Q502	F-5
Q503	E-3
RV101	J-4
RV102	J-2
RV103	J-2
RV302	H-4
RV303	H-1
RV304	J-1
TP103	J-2
TP303	G-3
TP501	F-6


N
M
L
K
J
H
G
1
2
3
4
5
6
CN12
CN13
Q403
R414
RV304
RV303
LV101
LV302
RV103
D151
RV102
TP103
Q106
Q306
D351
IC102
IC101
TP303
RV101
RV302
D303
D103
D104
CN11
CN14
CN10
CN5
CN2
CN3
CN15
CN16
Q206
Q207
Q8
Q7
AU-8


N
M
L
K
J
H
G
F
E
D
C
B
A
1
2
3
4
5
6
AU-82A 1-622-393-22
GCMK-77X
CN12
CN13
CN17
CN11
CN14
CN18
CN5
CN2
CN3
CN15
CN16
CN4
CN6
IC101
IC102
IC51
RV101
RV102
RV103
RV302
RV303
RV304
LV101
LV302
TP303
TP501
E501
Q501
Q502
Q503
Q51
Q53
Q54
Q55
Q251
D501
D502
D503
D504
D505
D52
D53
D103
D104
D151
D303
D351
W1
W2
W6
W12
W15
W17

AU-82A

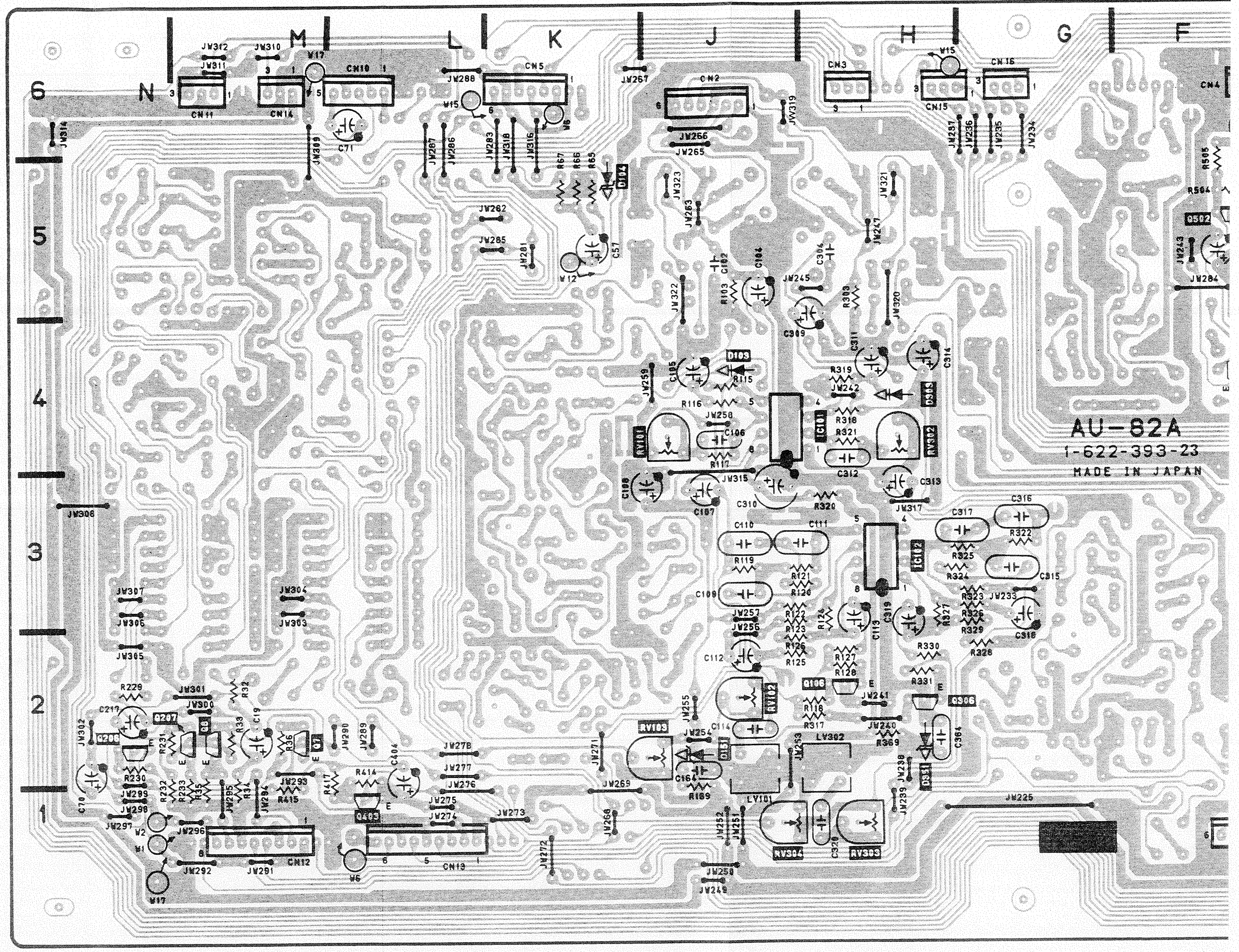
-COMPONENT SIDE-

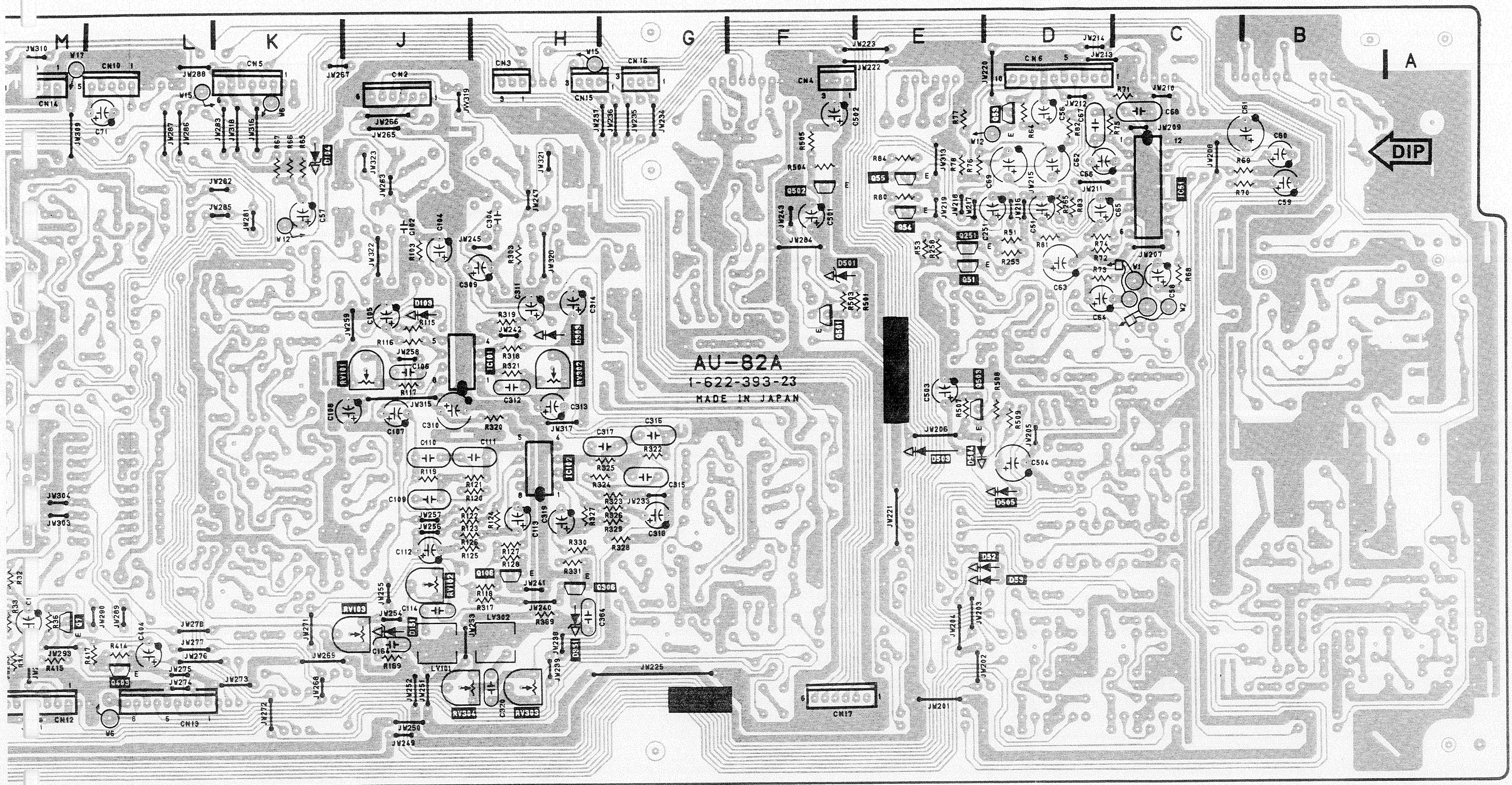
1-622-393-22
VP-9000
VP-9000P

AU-82A ; PB AMPLIFIER
EK ; S/N 10751 and higher

AU-82 (1-622-393-23)

CN2	J-6
CN3	H-6
CN4	F-6
CN5	K-6
CN6	D-6
CN10	L-6
CN11	M-6
CN12	M-1
CN13	L-1
CN14	M-6
CN15	H-6
CN16	G-6
CN17	F-1
D52	E-2
D53	E-2
D103	J-4
D104	K-5
D151	J-2
D303	H-4
D351	H-2
D501	F-4
D503	E-3
D504	E-3
D505	D-3
IC51	C-5
IC101	J-4
IC102	H-3
LV101	J-2
LV302	H-2
Q7	M-2
Q8	M-2
Q51	E-4
Q53	D-6
Q54	E-5
Q55	E-5
Q106	H-2
Q206	N-2
Q207	M-2
Q251	E-5
Q306	H-2
Q403	L-1
Q501	F-4
Q502	F-5
Q503	E-3
RV101	J-4
RV102	J-2
RV103	J-2
RV302	H-4
RV303	H-1
RV304	J-1


N
M
L
K
J
H
G
F
6
5
4
3
2
1
CN11
CN14
CN10
CN5
CN2
CN3
CN15
CN16
CN4
CN12
CN13
IC101
IC102
RV101
RV302
RV103
RV304
RV303
LV101
LV302
AU-82A
1-622-393-23
MADE IN JAPAN

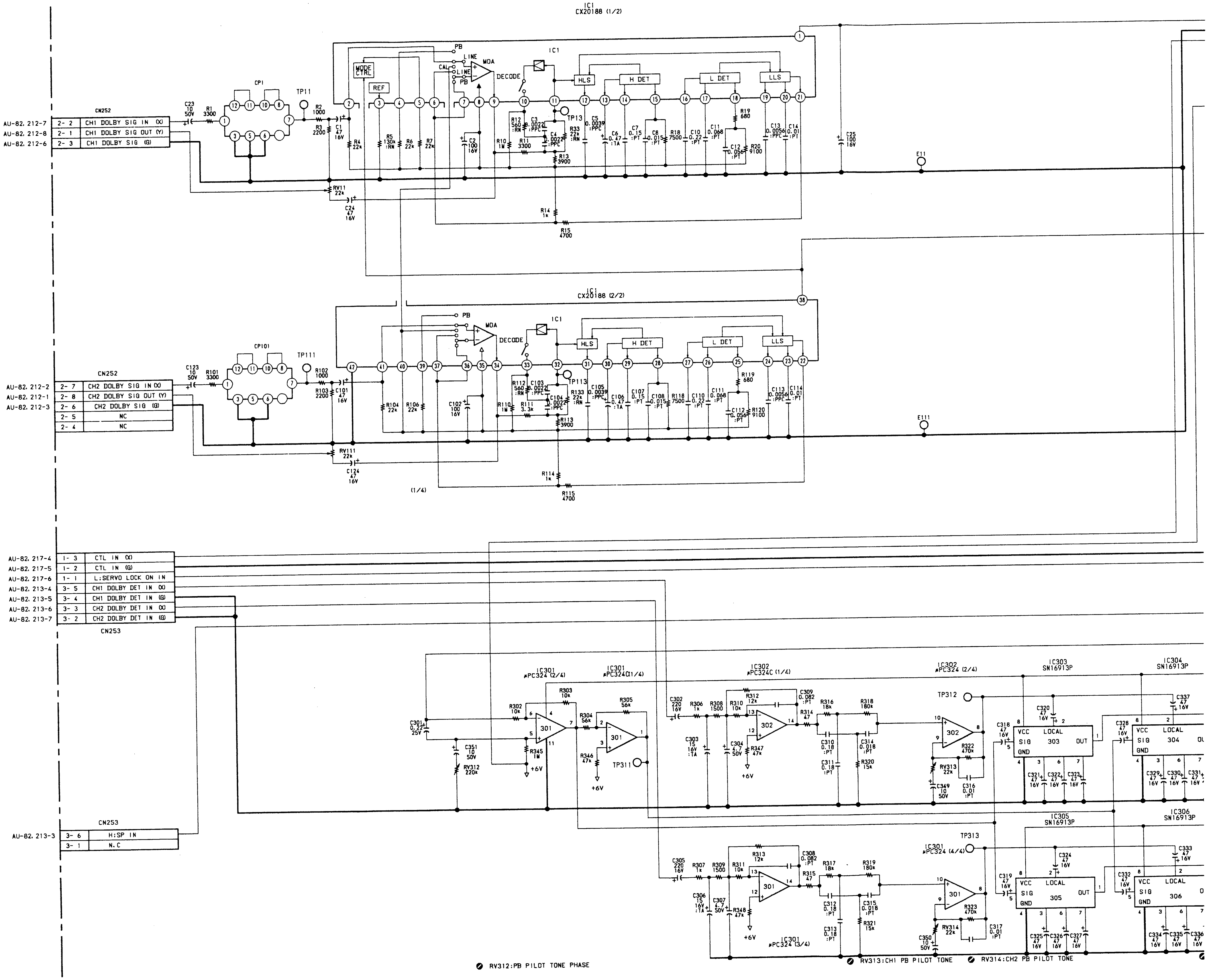

M
L
K
J
H
G
F
E
D
C
B
A
DIP
AU-82A
1-622-393-23
MADE IN JAPAN
CN10
CN14
CN5
CN2
CN3
CN15
CN16
CN4
CN6
CN12
CN13
CN17
IC101
IC102
IC61
RV101
RV102
RV103
RV152
RV304
RV303
LV101
LV302

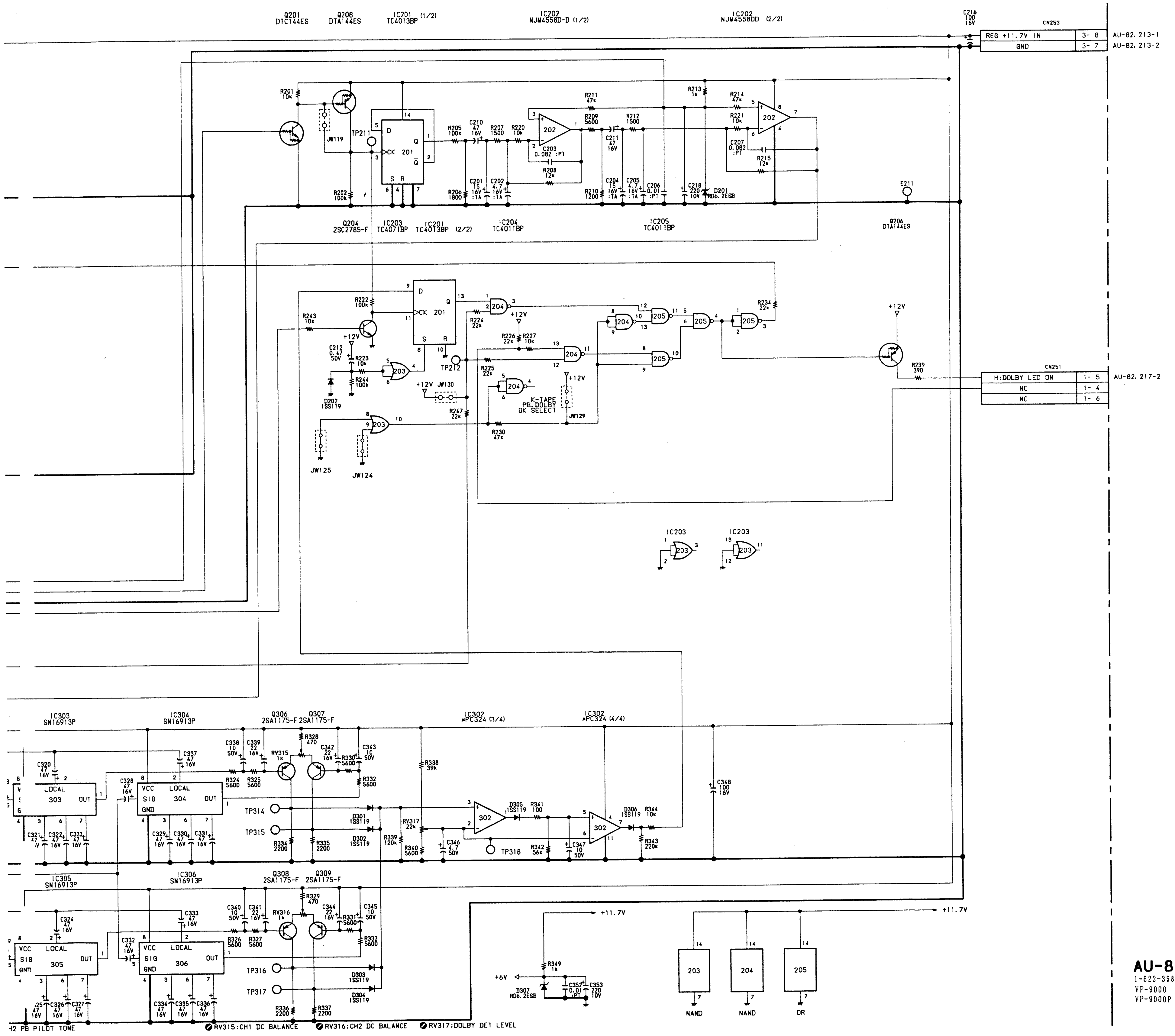
AU-82A

-COMPONENT SIDE-

1-622-393-23
VP-9000
VP-9000P

AU-89A ; DOLBY
EK ; S/N 10001 and higher


IC1
CX20188 (1/2)
IC1
CX20188 (2/2)
MODE CTRL
REF
MOA
LINE
CAL
PB
DECODE
HLS
H DET
L DET
LLS
CP1
CP101
TP11
TP111
TP13
TP113
E11
E111
CN252
AU-82, 212-7
AU-82, 212-8
AU-82, 212-6
2- 2
2- 1
2- 3
CH1 DOLBY SIG IN (X)
CH1 DOLBY SIG OUT (Y)
CH1 DOLBY SIG (G)
AU-82, 212-2
AU-82, 212-1
AU-82, 212-3
2- 7
2- 8
2- 6
2- 5
2- 4
CH2 DOLBY SIG IN (X)
CH2 DOLBY SIG OUT (Y)
CH2 DOLBY SIG (G)
NC
NC
C23 10 50V
R1 3300
C123 10 50V
R101 3300
AU-82, 217-4
AU-82, 217-5
AU-82, 217-6
AU-82, 213-4
AU-82, 213-5
AU-82, 213-6
AU-82, 213-7
1- 3
1- 2
1- 1
3- 5
3- 4
3- 3
3- 2
CTL IN (X)
CTL IN (G)
L:SERVO LOCK ON IN
CH1 DOLBY DET IN (X)
CH1 DOLBY DET IN (G)
CH2 DOLBY DET IN (X)
CH2 DOLBY DET IN (G)
CN253
CN253
AU-82, 213-3
3- 6
3- 1
H:SP IN
N.C
IC301 μPC324 (2/4)
IC301 μPC324 (1/4)
IC302 μPC324C (1/4)
IC302 μPC324 (2/4)
IC301 μPC324 (4/4)
IC301 μPC324 (3/4)
IC303 SN16913P
IC304 SN16913P
IC305 SN16913P
IC306 SN16913P
VCC
LOCAL
SIG
GND
OUT
TP311
TP312
TP313
+6V
(1/4)
RV312:PB PILOT TONE PHASE
RV313:CH1 PB PILOT TONE
RV314:CH2 PB PILOT TONE

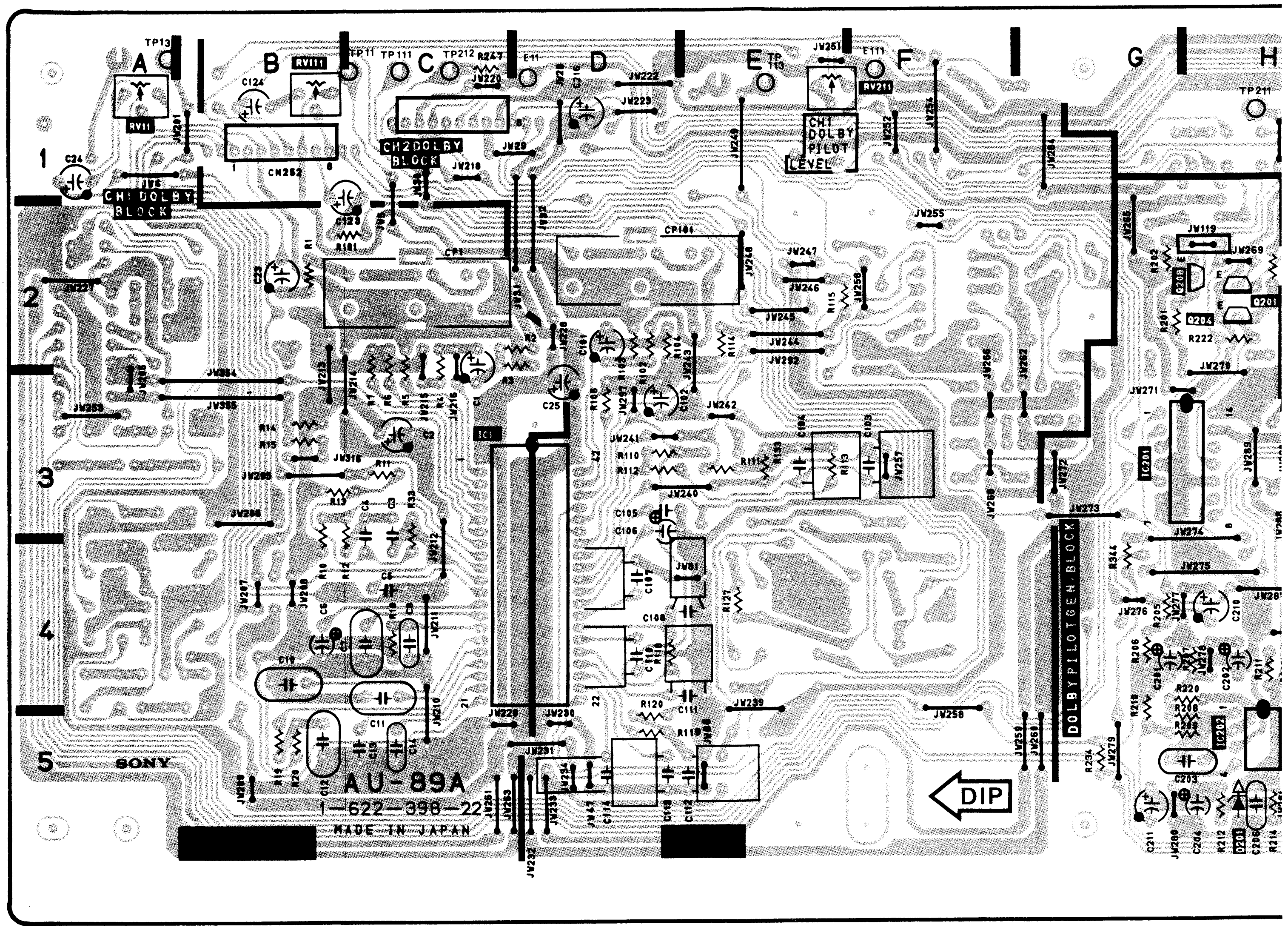

Q201 DTC144ES
Q208 DTA144ES
IC201 TC4013BP (1/2)
IC202 NJM4558D-D (1/2)
IC202 NJM4558DD (2/2)
C216 100 16V
CN253
REG +11.7V IN 3- 8
GND 3- 7
AU-82, 213-1
AU-82, 213-2
R201 10k
JW119
TP211
R202 100k
R205 100k
C210 47 16V
R207 1500
R220 10k
C203 0.082 :PT
R208 12k
R206 1800
C201 15 16V :TA
C202 4.7 16V :TA
R211 47k
R209 5600
R212 1500
C211 47 16V
R210 1200
C204 15 16V :TA
C205 4.7 16V :TA
C206 0.01 :PT
R213 1k
R214 47k
R221 10k
C207 0.082 :PT
R215 12k
C218 220 10V
D201 RD6.2ESB
E211
Q204 2SC2785-F
IC203 TC4071BP
IC201 TC4013BP (2/2)
IC204 TC4011BP
IC205 TC4011BP
Q206 DTA144ES
R222 100k
R243 10k
C212 0.47 50V
R223 10k
R244 100k
D202 1SS119
R224 22k
R226 22k
R227 10k
R225 22k
TP212
+12V
JW130
R247 22k
K-TAPE PB DOLBY OK SELECT
JW129
R230 47k
R234 22k
R239 390
CN251
H:DOLBY LED ON 1- 5
NC 1- 4
NC 1- 6
AU-82, 217-2
JW125
JW124
IC203
IC303 SN16913P
IC304 SN16913P
Q306 2SA1175-F
Q307 2SA1175-F
IC302 μPC324 (3/4)
IC302 μPC324 (4/4)
C320 47 16V
LOCAL 303 OUT
VCC SIG GND
LOCAL 304 OUT
C328 47 16V
C337 47 16V
C338 10 50V
C339 22 16V
RV315 1k
R328 470
C342 22 16V
R330 5600
C343 10 50V
R332 5600
R324 5600
R325 5600
R338 39k
C348 100 16V
TP314
TP315
D301 1SS119
D302 1SS119
R334 2200
R335 2200
RV317 22k
R339 120k
R340 5600
C346 4.7 50V
D305 1SS119
R341 100
TP318
R342 56k
C347 10 50V
D306 1SS119
R344 10k
R343 220k
C321 47
C322 47 16V
C323 47 16V
C329 47 16V
C330 47 16V
C331 47 16V
IC305 SN16913P
IC306 SN16913P
Q308 2SA1175-F
Q309 2SA1175-F
C324 47 16V
C333 47 16V
C340 10 50V
C341 22 16V
RV316 1k
R329 470
C344 22 16V
R331 5600
C345 10 50V
R333 5600
R326 5600
R327 5600
LOCAL 305 OUT
C332 47 16V
LOCAL 306 OUT
TP316
TP317
D303 1SS119
D304 1SS119
R336 2200
R337 2200
C325 47 16V
C326 47 16V
C327 47 16V
C334 47 16V
C335 47 16V
C336 47 16V
+11.7V
R349 1k
+6V
D307 RD6.2ESB
C352 0.01 :PT
C353 220 10V
203 NAND
204 NAND
205 OR
PB PILOT TONE
RV315:CH1 DC BALANCE
RV316:CH2 DC BALANCE
RV317:DOLBY DET LEVEL

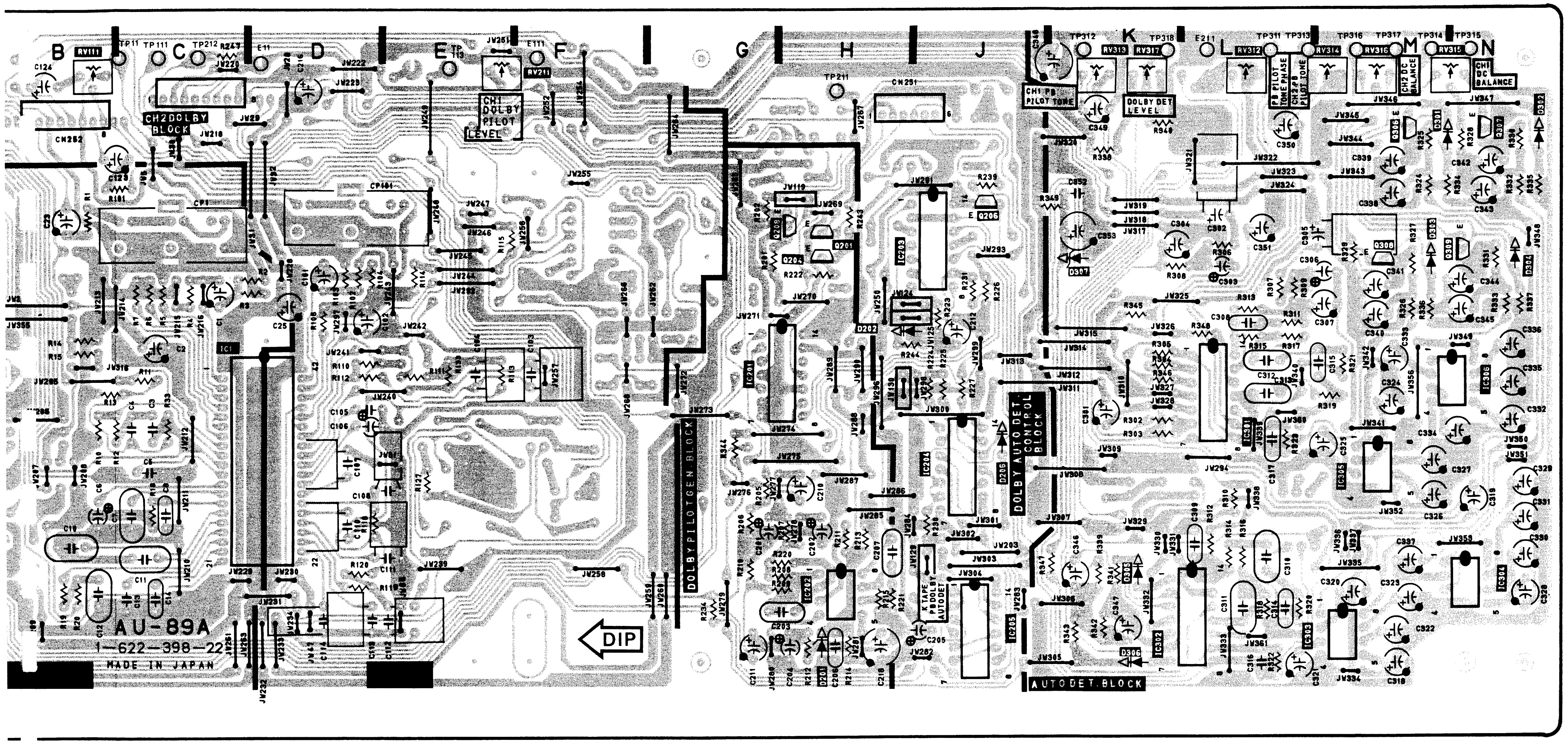
AU-89A
1-622-398-22,23
VP-9000
VP-9000P

AU-89A ; DOLBY
EK ; S/N 10001 thru 10350

AU-89A (1-622-398-22)

CN251	H-1
CN252	B-1
CN253	C-1
CP1	C-2
CP101	D-2
D201	H-5
D202	H-3
D206	J-4
D301	M-1
D302	N-1
D303	M-2
D304	N-2
D305	K-5
D306	K-5
D307	K-2
E11	D-1
E111	F-1
E211	L-1
IC1	D-4
IC201	H-3
IC202	H-5
IC203	J-2
IC204	J-4
IC205	J-5
IC301	L-3
IC302	L-5
IC303	M-5
IC304	N-5
IC305	M-4
IC306	N-3
Q201	H-2
Q204	H-2
Q206	J-2
Q208	H-2
Q306	M-1
Q307	N-1
Q308	M-2
Q309	N-2
RV11	A-1
RV111	B-1
RV211	E-1
RV312	L-1
RV313	K-1
RV314	M-1
RV315	N-1
RV316	M-1
RV317	K-1
TP11	C-1
TP13	A-1
TP111	C-1
TP112	E-1
TP113	E-1
TP211	H-1
TP212	C-1
TP311	L-1
TP312	K-1
TP313	L-1
TP314	M-1
TP315	N-1
TP316	M-1
TP317	M-1
TP318	K-1


A
B
C
D
E
F
G
H
1
2
3
4
5
CH1 DOLBY BLOCK
CH2 DOLBY BLOCK
CH1 DOLBY PILOT LEVEL
DOLBY PILOT GEN. BLOCK
SONY
AU-89A
1-622-398-22
MADE IN JAPAN
DIP


B
C
D
E
F
G
H
J
K
L
M
N
CH2DOLBY BLOCK
CH1 DOLBY PILOT LEVEL
CH1 PB PILOT TONE
DOLBY DET LEVEL
PB PILOT TONE PHASE
CH2 PB PILOT TONE
CH2 DC BALANCE
CH1 DC BALANCE
DOLBY PILOT GEN BLOCK
DOLBY AUTO DET CONTROL BLOCK
AUTO DET BLOCK
DIP
AU-89A
1-622-398-22
MADE IN JAPAN

AU -89A

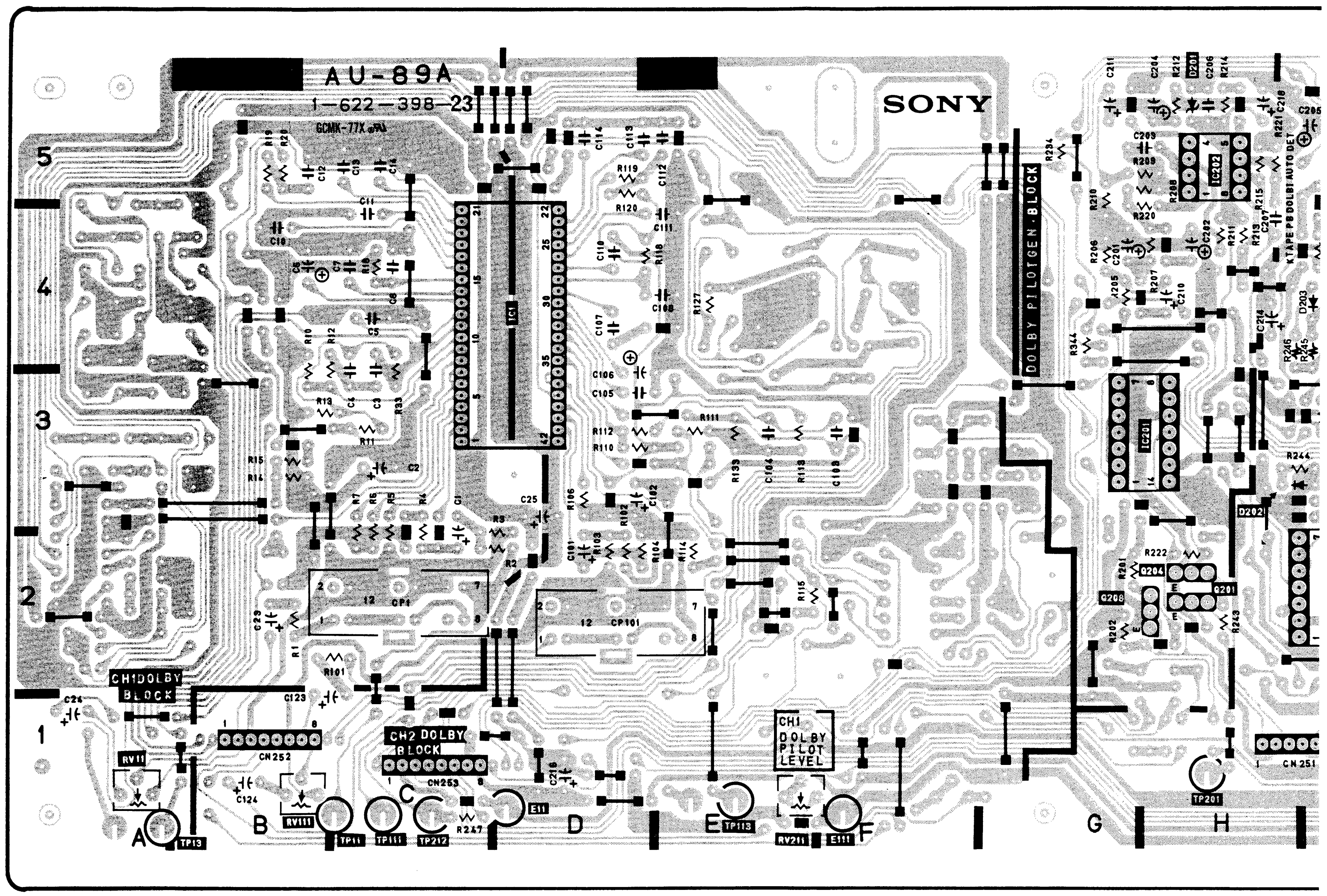
-COMPONENT SIDE-

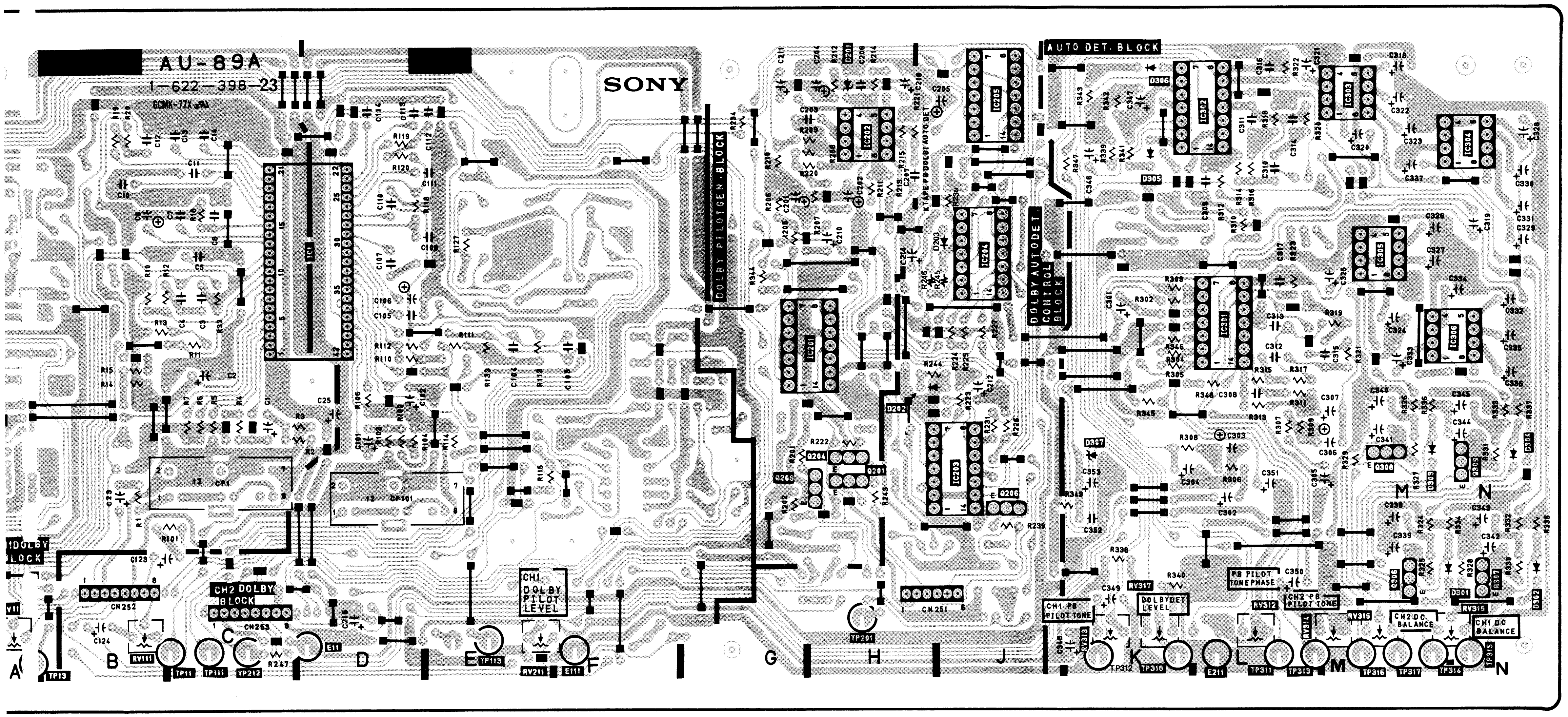
1-622-398-22
VP-9000
VP-9000P

AU-89A ; DOLBY
EK ; S/N 10351 and higher

AU-89A (1-622-398-23)

CN251	H-1
CN252	B-1
CN253	C-1
CP1	C-2
CP101	D-2
D201	H-5
D202	H-3
D203	J-4
D301	N-1
D302	N-1
D303	M-2
D304	N-2
D305	K-5
D306	K-5
D307	K-2
E11	D-1
E111	F-1
E211	L-1
IC1	D-4
IC201	H-3
IC202	H-5
IC204	J-4
IC205	J-5
IC301	L-3
IC302	L-5
IC303	M-5
IC304	N-5
IC305	M-4
IC306	N-3
Q201	H-2
Q204	H-2
Q206	J-2
Q306	M-1
Q307	N-1
Q308	M-2
Q309	N-2
RV11	A-1
RV111	B-1
RV211	E-1
RV311	L-1
RV313	K-1
RV314	M-1
RV315	N-1
RV316	M-1
RV317	K-1
TP11	C-1
TP13	A-1
TP111	C-1
TP113	E-1
TP201	H-1
TP212	C-1
TP311	L-1
TP312	K-1
TP313	L-1
TP314	M-1
TP315	N-1
TP316	M-1
TP317	M-1
TP318	K-1


AU-89A
1-622-398-23
SONY
DOLBY PILOTGEN. BLOCK
CH1 DOLBY BLOCK
CH2 DOLBY BLOCK
CH1 DOLBY PILOT LEVEL
IC1
IC201
IC202
CP1
CP101
CN251
CN252
CN253
RV11
RV111
RV211
TP13
TP11
TP111
TP212
TP113
TP201
E11
E111
A
B
C
D
E
F
G
H
1
2
3
4
5


AU-89A
1-622-398-23
SONY
DOLBY PILOTGEN BLOCK
DOLBY AUTODET CONTROL BLOCK
AUTO DET. BLOCK
CH2 DOLBY BLOCK
CH1 DOLBY PILOT LEVEL
CH1 PB PILOT TONE
DOLBY DET LEVEL
PB PILOT TONE PHASE
CH2 PB PILOT TONE
CH2 DC BALANCE
CH1 DC BALANCE
IC1
IC201
IC202
IC203
IC204
IC205
IC301
IC302
IC303
IC304
IC305
IC306
CP1
CP101
CN251
CN252
CN253
RV111
RV211
RV312
RV313
RV314
RV315
RV316
RV317
TP11
TP13
TP111
TP113
TP201
TP212
TP311
TP312
TP313
TP314
TP315
TP316
TP317
TP318
E11
E111
E211
A
B
C
D
E
F
G
H
I
J
K
L
M
N

AU-89A

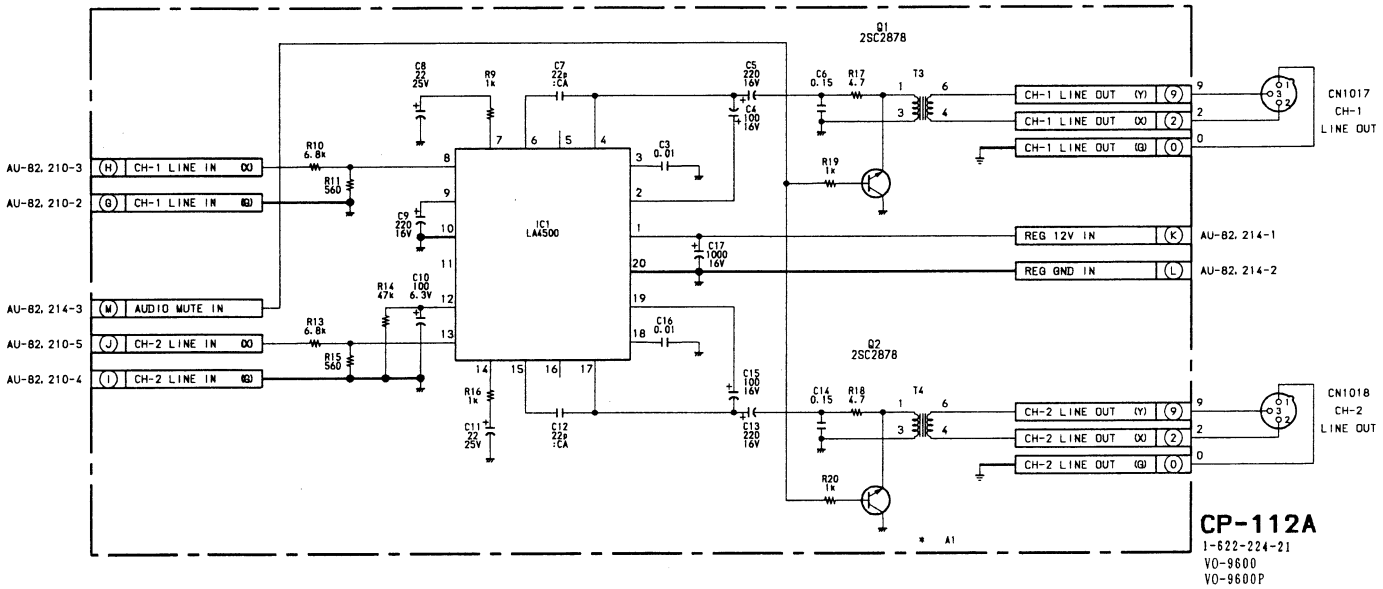
-SOLDERING SIDE-

1-622-398-23

VP-9000

VP-9000P

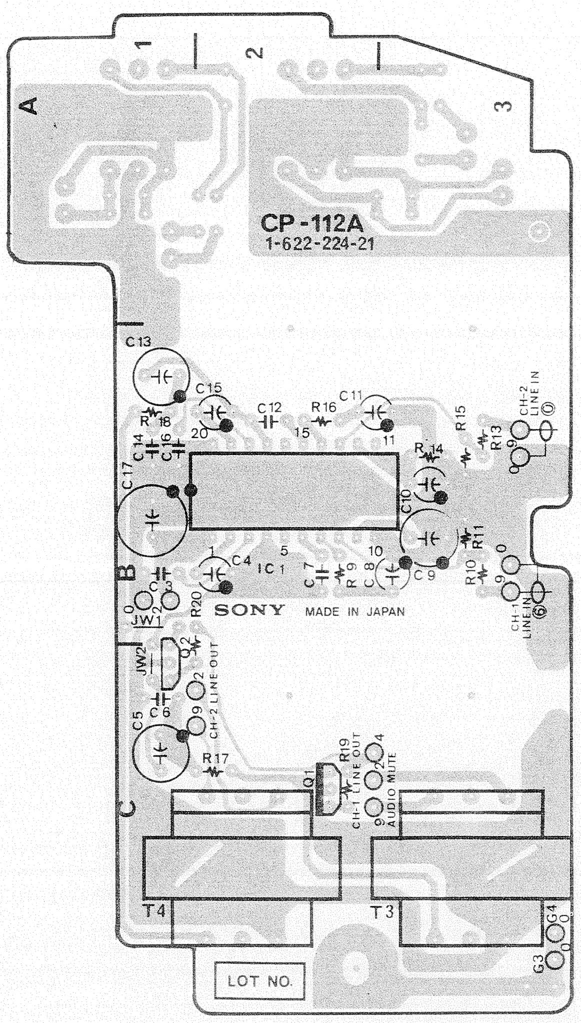
CP-112A ; OUTPUT AMPLIFIER


AU-82, 210-3
(H) CH-1 LINE IN (X)
AU-82, 210-2
(G) CH-1 LINE IN (G)
AU-82, 214-3
(M) AUDIO MUTE IN
AU-82, 210-5
(J) CH-2 LINE IN (X)
AU-82, 210-4
(I) CH-2 LINE IN (G)
R10 6.8k
R11 560
R13 6.8k
R15 560
R14 47k
C10 100 6.3V
C9 220 16V
C8 22 25V
R9 1k
C7 22p :CA
C5 220 16V
C4 100 16V
C3 0.01
IC1 LA4500
C17 1000 16V
C16 0.01
C15 100 16V
C13 220 16V
C12 22p :CA
R16 1k
C11 22 25V
Q1 2SC2878
C6 0.15
R17 4.7
T3
R19 1k
Q2 2SC2878
C14 0.15
R18 4.7
T4
R20 1k
CH-1 LINE OUT (Y) (9)
CH-1 LINE OUT (X) (2)
CH-1 LINE OUT (G) (0)
REG 12V IN (K)
AU-82, 214-1
REG GND IN (L)
AU-82, 214-2
CH-2 LINE OUT (Y) (9)
CH-2 LINE OUT (X) (2)
CH-2 LINE OUT (G) (0)
CN1017 CH-1 LINE OUT
CN1018 CH-2 LINE OUT
* A1
CP-112A
1-622-224-21
VO-9600
VO-9600P

CP-112A ; OUTPUT AMPLIFIER

CP-112A (1-622-224-21)

IC1	B-2
Q1	C-2
Q2	C-1
T3	C-3
T4	C-2


1
2
3
A
B
C
CP-112A
1-622-224-21
C13
C15
C12
R16
C11
R18
20
15
11
R15
CH-2 LINE IN
C14
C16
R14
R13
C17
C10
IC1
R11
1
5
10
C4
C7
R9
C8
C9
R10
C3
JW1
R20
SONY
MADE IN JAPAN
CH-1 LINE IN
JW2
Q2
CH-2 LINE OUT
C5
C6
R17
Q1
R19
CH-1 LINE OUT
AUDIO MUTE
T4
T3
G4
G3
LOT NO.

CP-112A

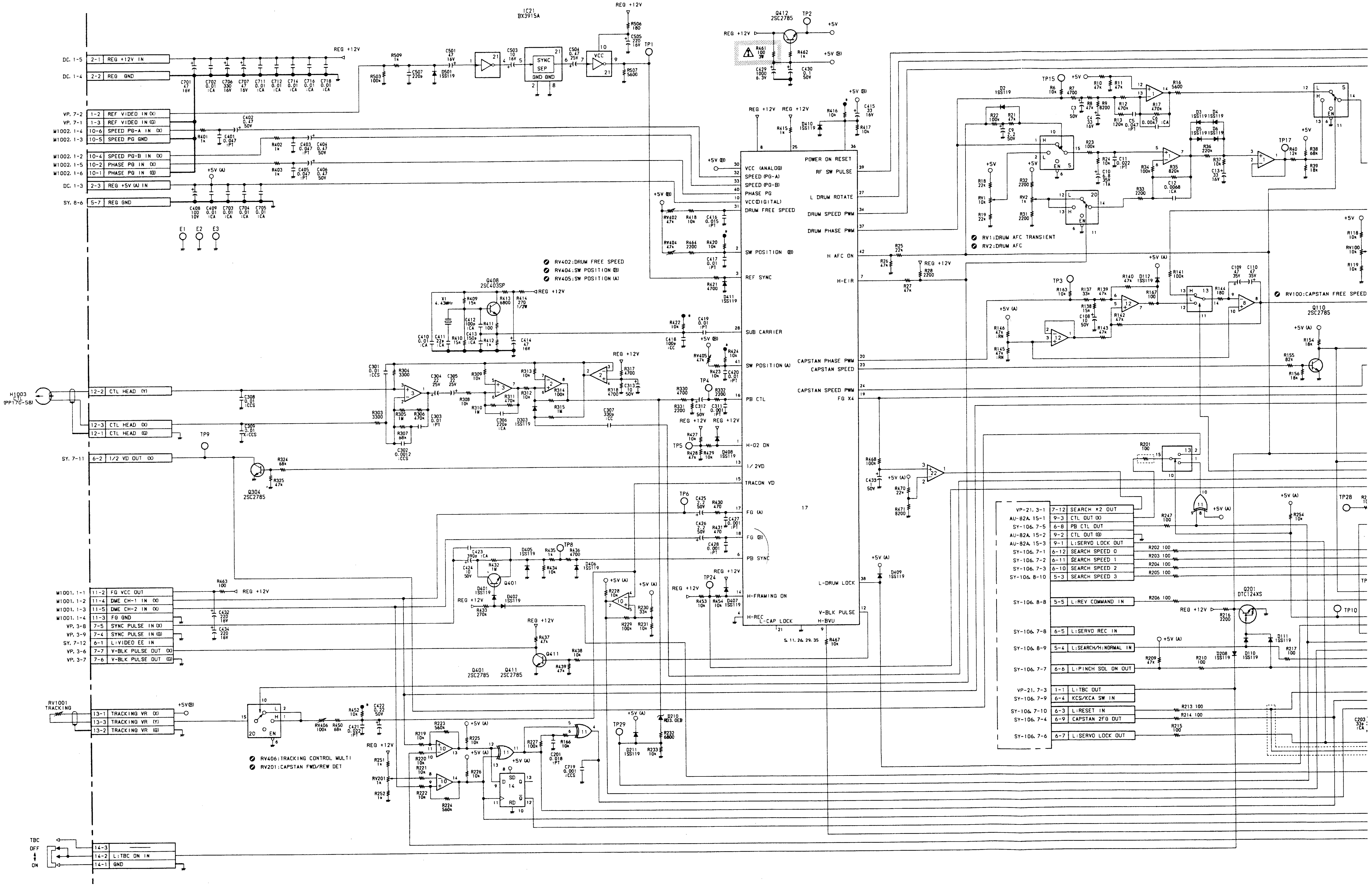
-COMPONENT SIDE-

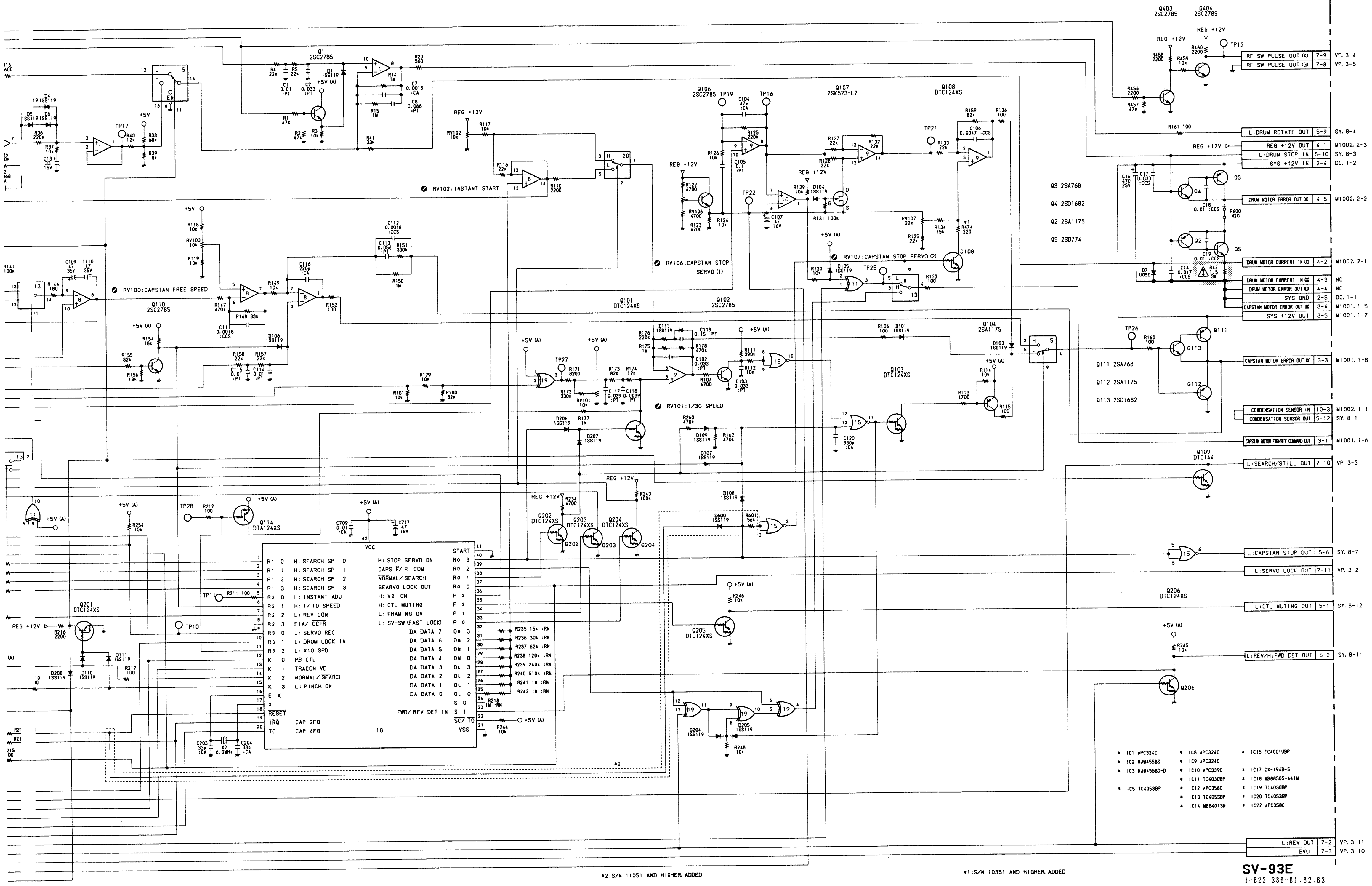
1-622-224-21

VP-9000

VP-9000P

SV-93E; SERVO SYSTEM
EK; S/N 10001 and higher


IC21 BX3915A
REG +12V
REG GND
REF VIDEO IN
SPEED PG-A IN
SPEED PG GND
SPEED PG-B IN
PHASE PG IN
REG +5V (A) IN
CTL HEAD (Y)
CTL HEAD (X)
CTL HEAD (G)
1/2 VD OUT (X)
FG VCC OUT
DME CH-1 IN (X)
DME CH-2 IN (X)
FG GND
SYNC PULSE IN (X)
SYNC PULSE IN (G)
L:VIDEO EE IN
V-BLK PULSE OUT (X)
V-BLK PULSE OUT (G)
TRACKING VR (X)
TRACKING VR (Y)
TRACKING VR (G)
TBC OFF ON
L:TBC ON IN
GND
POWER ON RESET
RF SW PULSE
L DRUM ROTATE
DRUM SPEED PWM
DRUM PHASE PWM
H AFC ON
H-EIR
SUB CARRIER
SW POSITION (A)
SW POSITION (B)
REF SYNC
PB CTL
H-02 ON
1/2VD
TRACON VD
FG (A)
FG (B)
PB SYNC
H-FRAMING ON
H-REC
L-CAP LOCK
L-DRUM LOCK
V-BLK PULSE
H-BVU
CAPSTAN PHASE PWM
CAPSTAN SPEED
CAPSTAN SPEED PWM
FG X4
VCC (ANALOG)
VCC (DIGITAL)
DRUM FREE SPEED
RV402:DRUM FREE SPEED
RV404:SW POSITION (B)
RV405:SW POSITION (A)
RV1:DRUM AFC TRANSIENT
RV2:DRUM AFC
RV100:CAPSTAN FREE SPEED
RV406:TRACKING CONTROL MULTI
RV201:CAPSTAN FWD/REW DET
SEARCH #2 OUT
CTL OUT (X)
PB CTL OUT
CTL OUT (G)
L:SERVO LOCK OUT
SEARCH SPEED 0
SEARCH SPEED 1
SEARCH SPEED 2
SEARCH SPEED 3
L:REV COMMAND IN
L:SERVO REC IN
L:SEARCH/H:NORMAL IN
L:PINCH SOL ON OUT
L:TBC OUT
KCS/KCA SW IN
L:RESET IN
CAPSTAN 2FG OUT
L:SERVO LOCK OUT
Q412 2SC2785
Q408 2SC403SP
Q304 2SC2785
Q401 2SC2785
Q411 2SC2785
Q110 2SC2785
Q201 DTC124XS
H1003 (PP17C-58)
RV1001 TRACKING
TP1
TP2
TP3
TP4
TP5
TP6
TP8
TP9
TP10
TP15
TP17
TP24
TP28
TP29
E1
E2
E3


Q403 2SC2785
Q404 2SC2785
REG +12V
TP12
RF SW PULSE OUT (X) 7-9 VP. 3-4
RF SW PULSE OUT (Q) 7-8 VP. 3-5
L:DRUM ROTATE OUT 5-9 SY. 8-4
REG +12V OUT 4-1 M1002. 2-3
L:DRUM STOP IN 5-10 SY. 8-3
SYS +12V IN 2-4 DC. 1-2
DRUM MOTOR ERROR OUT (X) 4-5 M1002. 2-2
DRUM MOTOR CURRENT IN (X) 4-2 M1002. 2-1
DRUM MOTOR CURRENT IN (G) 4-3 NC
DRUM MOTOR ERROR OUT (G) 4-4 NC
SYS GND 2-5 DC. 1-1
CAPSTAN MOTOR ERROR OUT (G) 3-4 M1001. 1-5
SYS +12V OUT 3-5 M1001. 1-7
CAPSTAN MOTOR ERROR OUT (X) 3-3 M1001. 1-8
CONDENSATION SENSOR IN 10-3 M1002. 1-1
CONDENSATION SENSOR OUT 5-12 SY. 8-1
CAPSTAN MOTOR FWD/REV COMMAND OUT 3-1 M1001. 1-6
L:SEARCH/STILL OUT 7-10 VP. 3-3
L:CAPSTAN STOP OUT 5-6 SY. 8-7
L:SERVO LOCK OUT 7-11 VP. 3-2
L:CTL MUTING OUT 5-1 SY. 8-12
L:REV/H:FWD DET OUT 5-2 SY. 8-11
L:REV OUT 7-2 VP. 3-11
BVU 7-3 VP. 3-10
Q3 2SA768
Q4 2SD1682
Q2 2SA1175
Q5 2SD774
Q111 2SA768
Q112 2SA1175
Q113 2SD1682
R600 N20
R42 1.5 3W
Q1 2SC2785
Q106 2SC2785
Q107 2SK523-L2
Q108 DTC124XS
Q110 2SC2785
Q101 DTC124XS
Q102 2SC2785
Q103 DTC124XS
Q104 2SA1175
Q109 DTC144
Q114 DTA124XS
Q201 DTC124XS
Q202 DTC124XS
Q203 DTC124XS
Q204 DTC124XS
Q205 DTC124XS
Q206 DTC124XS
RV102:INSTANT START
RV100:CAPSTAN FREE SPEED
RV106:CAPSTAN STOP SERVO (1)
RV107:CAPSTAN STOP SERVO (2)
RV101:1/30 SPEED
TP17
TP19
TP16
TP21
TP22
TP25
TP26
TP27
TP28
TP11
TP10
VCC
R1 0 H: SEARCH SP 0
R1 1 H: SEARCH SP 1
R1 2 H: SEARCH SP 2
R1 3 H: SEARCH SP 3
R2 0 L: INSTANT ADJ
R2 1 H: 1/10 SPEED
R2 2 L: REV COM
R2 3 EIA/ CCIR
R3 0 L: SERVO REC
R3 1 L: DRUM LOCK IN
R3 2 L: X10 SPD
K 0 PB CTL
K 1 TRACON VD
K 2 NORMAL/ SEARCH
K 3 L: PINCH ON
E X
X
RESET
IRQ CAP 2FG
TC CAP 4FG
START
H: STOP SERVO ON RO 3
CAPS F/ R COM RO 2
NORMAL/ SEARCH RO 1
SEARVO LOCK OUT RO 0
H: V2 ON P 3
H: CTL MUTING P 2
L: FRAMING ON P 1
L: SV-SW (FAST LOCK) P 0
DA DATA 7 OM 3
DA DATA 6 OM 2
DA DATA 5 OM 1
DA DATA 4 OM 0
DA DATA 3 OL 3
DA DATA 2 OL 2
DA DATA 1 OL 1
DA DATA 0 OL 0
S 0
FWD/ REV DET IN S 1
SC/ TO
VSS
18
R235 15k :RN
R236 30k :RN
R237 62k :RN
R238 120k :RN
R239 240k :RN
R240 510k :RN
R241 1M :RN
R242 1M :RN
R218 1M :RN
R244 10k
X2 6.0MHz
* IC1 μPC324C
* IC2 NJM4558S
* IC3 NJM4558D-D
* IC5 TC4053BP
* IC8 μPC324C
* IC9 μPC324C
* IC10 μPC339C
* IC11 TC4030BP
* IC12 μPC358C
* IC13 TC4053BP
* IC14 MB84013M
* IC15 TC4001UBP
* IC17 CX-194B-5
* IC18 MB88505-441M
* IC19 TC4030BP
* IC20 TC4053BP
* IC22 μPC358C

*2:S/N 11051 AND HIGHER ADDED

*1:S/N 10351 AND HIGHER ADDED

SV-93E
1-622-386-61,62,63
VP-9000P

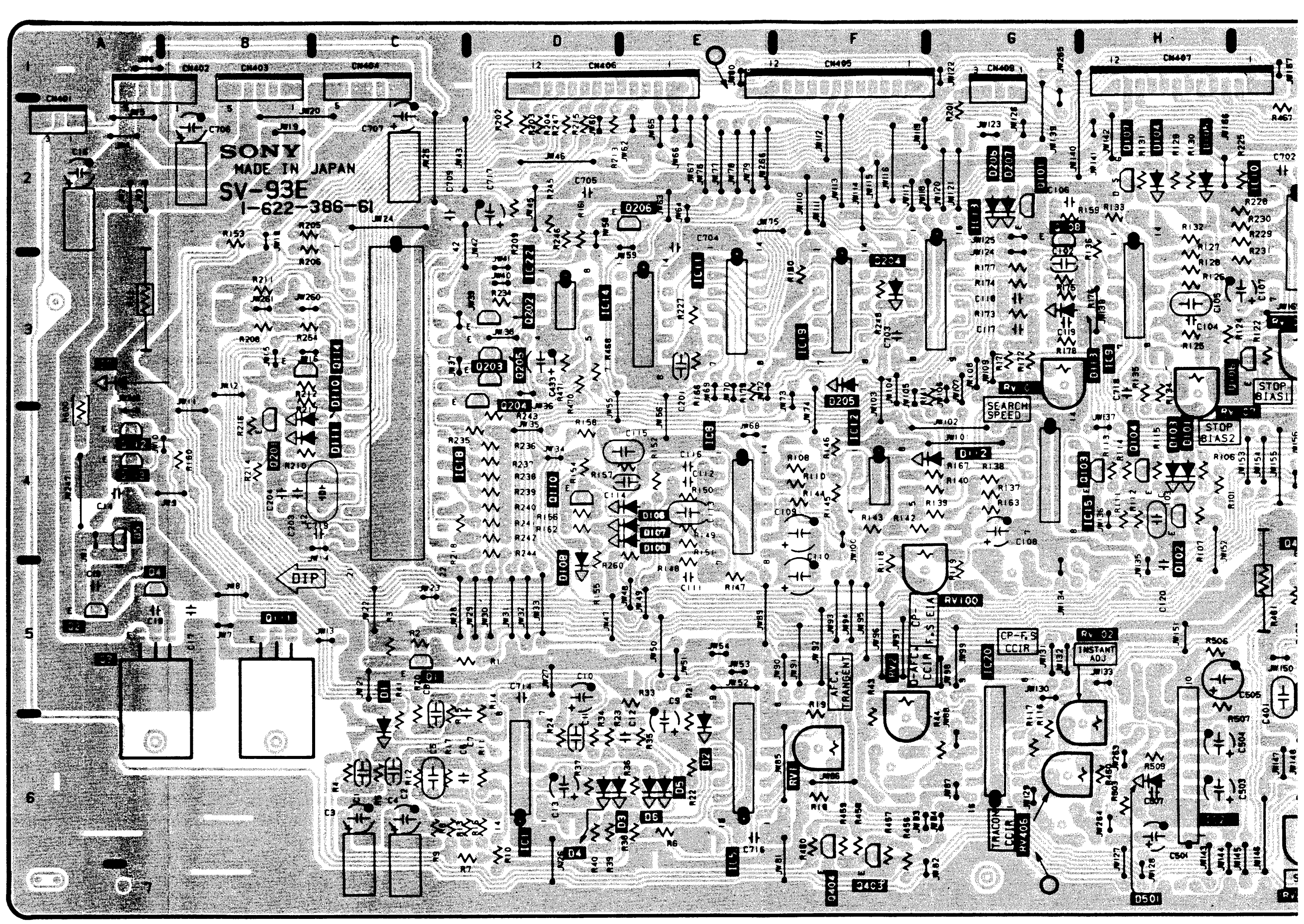
NOTE;

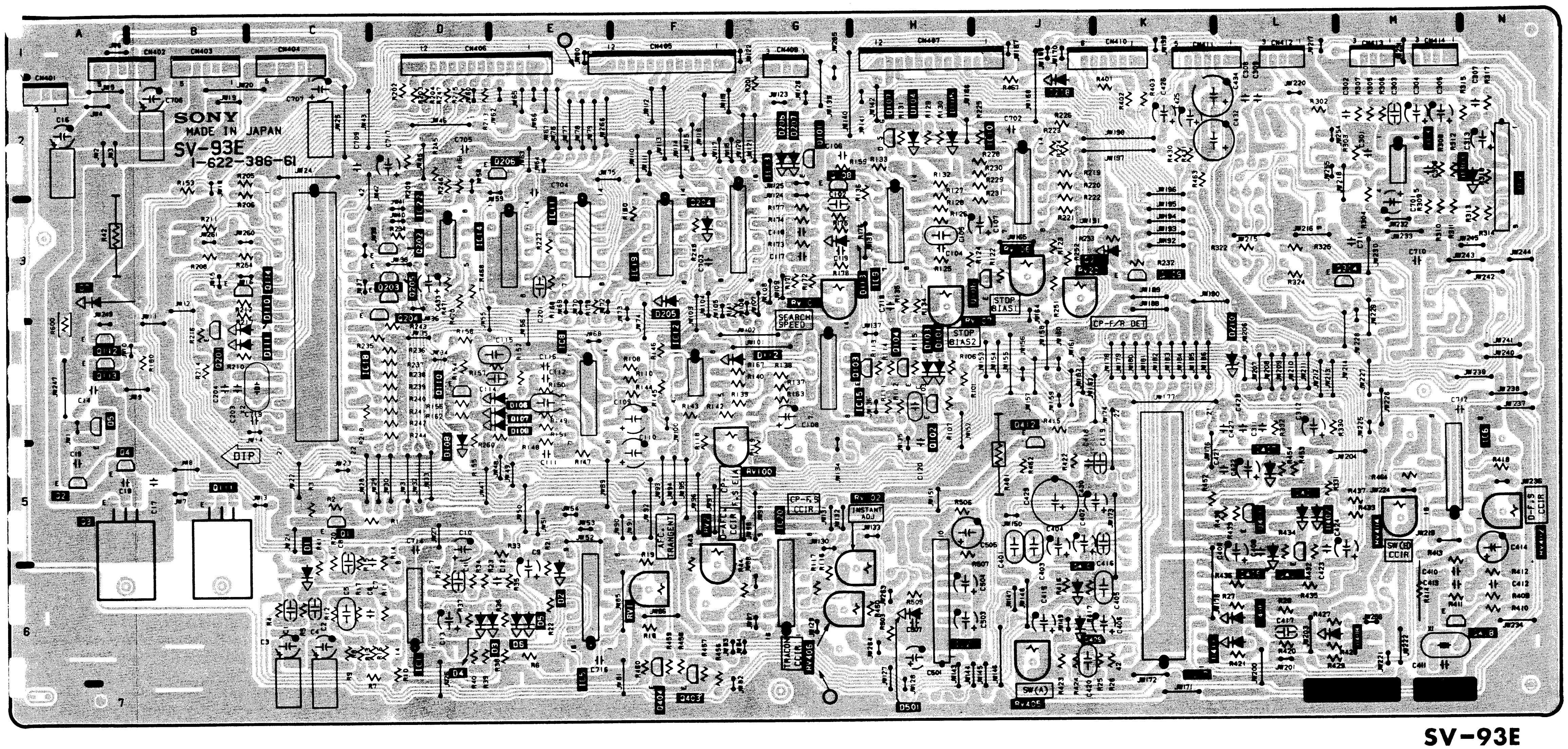
The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

SV-93E ; SERVO SYSTEM
EK ; S/N 10001 thru 10350

SV-93E (1-622-386-61)

CN401	A-2
CN402	A-1
CN403	B-1
CN404	C-1
CN405	F-1
CN406	D-1
CN407	H-1
CN409	G-1
CN410	K-1
CN411	K-1
CN412	L-1
CN413	M-1
CN414	M-1
D1	C-6
D2	E-6
D3	D-6
D4	D-6
D5	E-6
D6	E-6
D7	A-3
D101	H-4
D103	H-4
D104	H-2
D105	H-2
D106	E-4
D107	E-4
D108	D-5
D109	E-4
D110	B-4
D111	B-4
D112	G-4
D113	G-3
D204	F-3
D205	F-3
D206	G-2
D207	G-2
D208	J-2
D210	L-4
D211	K-3
D303	N-2
D401	L-5
D402	L-5
D405	L-5
D406	L-6
D407	L-5
D408	L-6
D409	J-6
D410	J-6
D411	L-6
D501	H-6
IC1	D-6
IC2	N-2
IC3	M-2
IC5	E-6
IC6	M-5
IC8	E-4
IC9	H-3
IC10	J-2
IC11	E-3
IC12	F-4
IC13	G-3
IC14	E-3
IC15	G-4
IC17	K-5
IC18	C-3
IC19	F-3
IC20	G-6
IC21	H-6
IC22	D-3
Q1	C-5
Q2	A-5
Q3	A-5
Q4	A-5
Q5	A-4
Q101	G-2
Q102	H-4
Q103	H-4
Q104	H-4
Q106	J-3
Q107	H-2
Q108	G-2
Q109	K-3
Q110	D-4
Q111	B-5
Q112	A-4
Q113	A-4
Q114	B-3
Q201	B-4
Q202	D-3
Q203	D-3
Q204	D-3
Q205	D-3
Q206	E-2
Q304	M-3
Q401	L-5
Q403	F-6
Q404	F-6
Q408	M-6
Q411	L-5
Q412	J-5
RV1	F-6
RV2	F-6
RV100	F-5
RV101	G-3
RV102	H-6
RV106	J-3
RV107	H-3
RV201	J-3
RV402	N-5
RV404	M-5
RV405	J-6
RV406	G-6
X1	M-6
X2	C-4


A
B
C
D
E
F
G
H
1
2
3
4
5
6
7
CN401
CN402
CN403
CN404
CN406
CN405
CN408
CN407
SONY
MADE IN JAPAN
SV-93E
1-622-386-61
DIP
SEARCH SPEED
STOP BIAS1
STOP BIAS2
INSTANT ADJ
CP-F.S CCIR
AFC TRANGENT
TRACON CCIR
RV100
RV406
D501
C702
C704
C705
C706
C707


SONY
MADE IN JAPAN
SV-93E
1-622-386-61
DIP
SEARCH SPEED
STOP BIAS1
STOP BIAS2
CP-F/R DET
CP-F.S CCIR
INSTANT ADJ
TRACON CCIR
SW(A)
SW(B) CCIR
D-F/S CCIR
A B C D E F G H J K L M N
1 2 3 4 5 6 7

SV-93E

-COMPONENT SIDE-

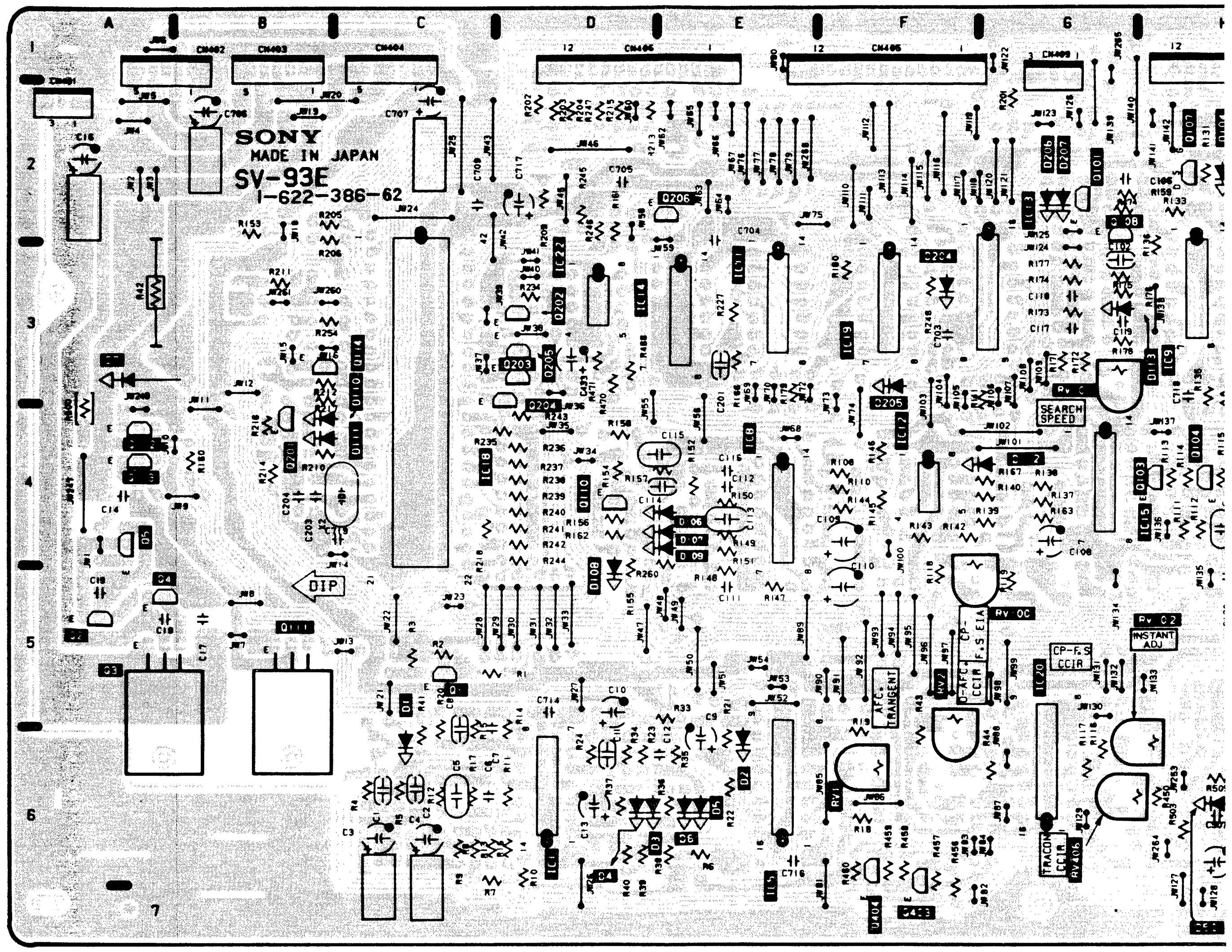
1-622-386-61

VP-9000P

SV-93E ; SERVO SYSTEM
EK ; S/N 10351 thru 11050

SV-93E (1-622-386-62)

CN401	A-2
CN402	A-1
CN403	B-1
CN404	C-1
CN405	F-1
CN406	D-1
CN407	H-1
CN409	G-1
CN410	K-1
CN411	K-1
CN412	L-1
CN413	M-1
CN414	M-1
D1	C-6
D2	E-6
D3	D-6
D4	D-6
D5	E-6
D6	E-6
D7	A-3
D101	H-4
D103	H-4
D104	H-2
D105	H-2
D106	E-4
D107	E-4
D108	D-5
D109	E-4
D110	B-4
D111	B-4
D112	G-4
D113	G-3
D204	F-3
D205	F-3
D206	G-2
D207	G-2
D208	J-2
D210	L-4
D211	K-3
D303	N-2
D401	L-5
D402	L-5
D405	L-5
D406	L-6
D407	L-5
D408	L-6
D409	J-6
D410	J-6
D411	L-6
D501	H-6
IC1	D-6
IC2	N-2
IC3	M-2
IC5	E-6
IC8	E-4
IC9	H-3
IC10	J-2
IC11	E-3
IC12	F-4
IC13	G-3
IC14	E-3
IC15	G-4
IC17	K-5
IC18	C-3
IC19	F-3
IC20	G-6
IC21	H-6
IC22	D-3
Q1	C-5
Q2	A-5
Q3	A-5
Q4	A-5
Q5	A-4
Q101	G-2
Q102	H-4
Q103	H-4
Q104	H-4
Q106	J-3
Q107	H-2
Q108	G-2
Q109	K-3
Q110	D-4
Q111	B-5
Q112	A-4
Q113	A-4
Q114	B-3
Q201	B-4
Q202	D-3
Q203	D-3
Q204	D-3
Q205	D-3
Q206	E-2
Q304	M-3
Q401	L-5
Q403	F-6
Q404	F-6
Q408	M-6
Q411	L-5
Q412	J-5
RV1	F-6
RV2	F-6
RV100	F-5
RV101	G-3
RV102	H-6
RV106	J-3
RV107	H-3
RV201	J-3
RV402	N-5
RV404	M-5
RV405	J-6
RV406	G-6
X1	M-6
X2	C-4


A
B
C
D
E
F
G
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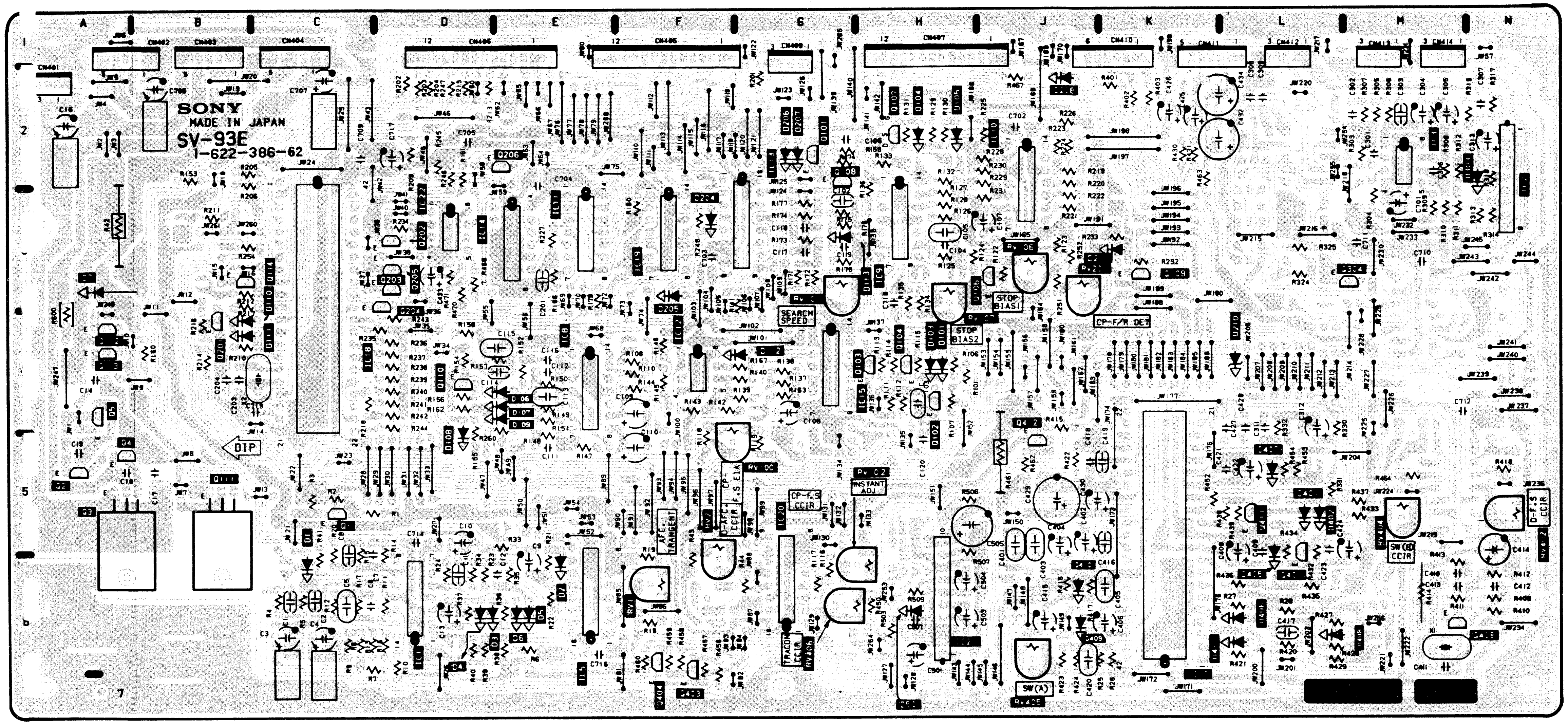
6
7
SONY
MADE IN JAPAN
SV-93E
1-622-386-62
CN402
CN403
CN404
CN406
CN405
CN409
SEARCH SPEED
INSTANT ADJ
DIP
CP-F.S CCIR
TRACKING


A
B
C
D
E
F
G
H
J
K
L
M
N
SONY
MADE IN JAPAN
SV-93E
1-622-386-62
DIP
SEARCH SPEED
STOP BIAS1
STOP BIAS2
CP-F/R DET
INSTANT ADJ
CP-F.S CCIR
AFC TANGENT
D-F.S CCIR
SW(B) CCIR
SW(A)
TRACKING CCIR

SV-93E

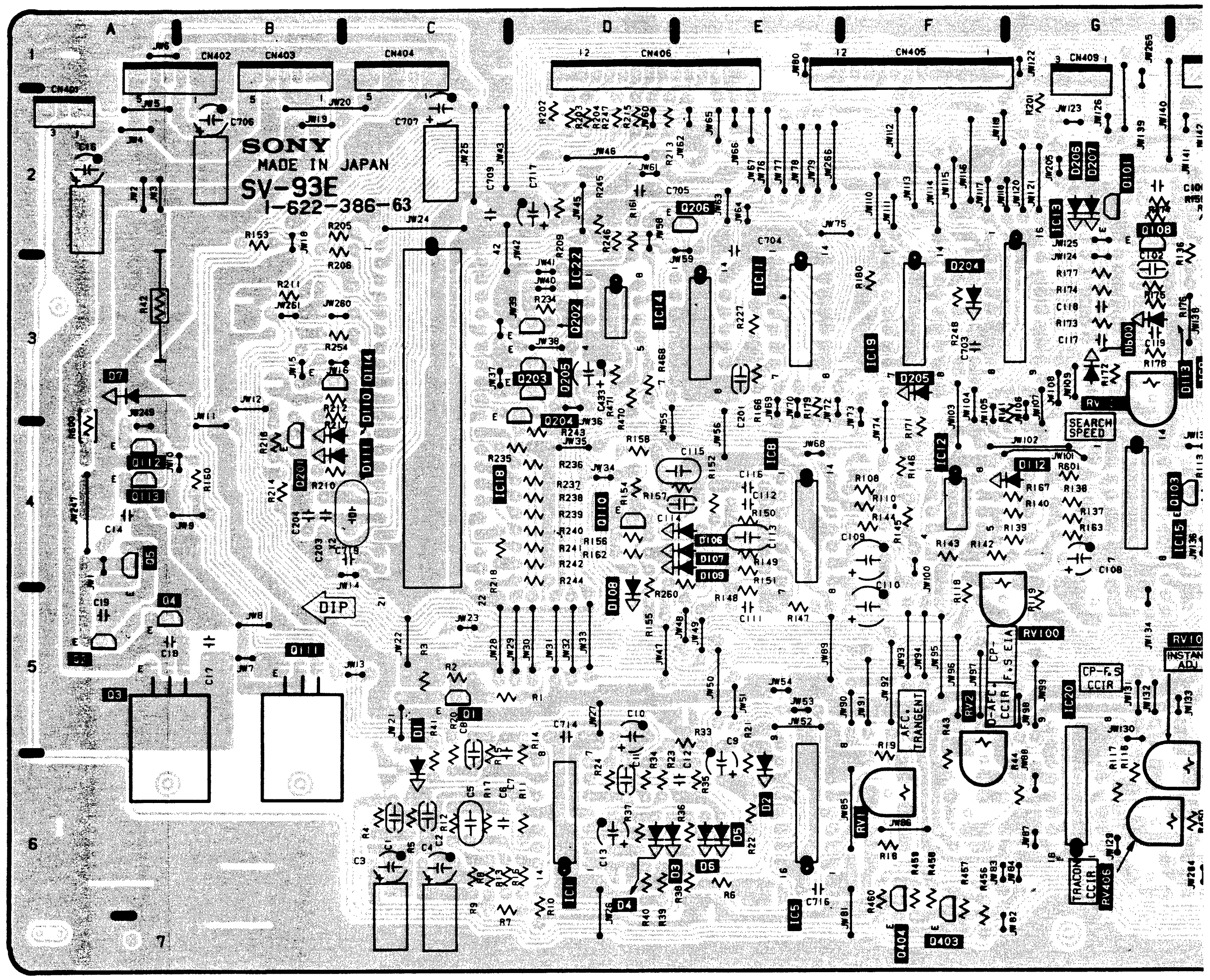
-COMPONENT SIDE-

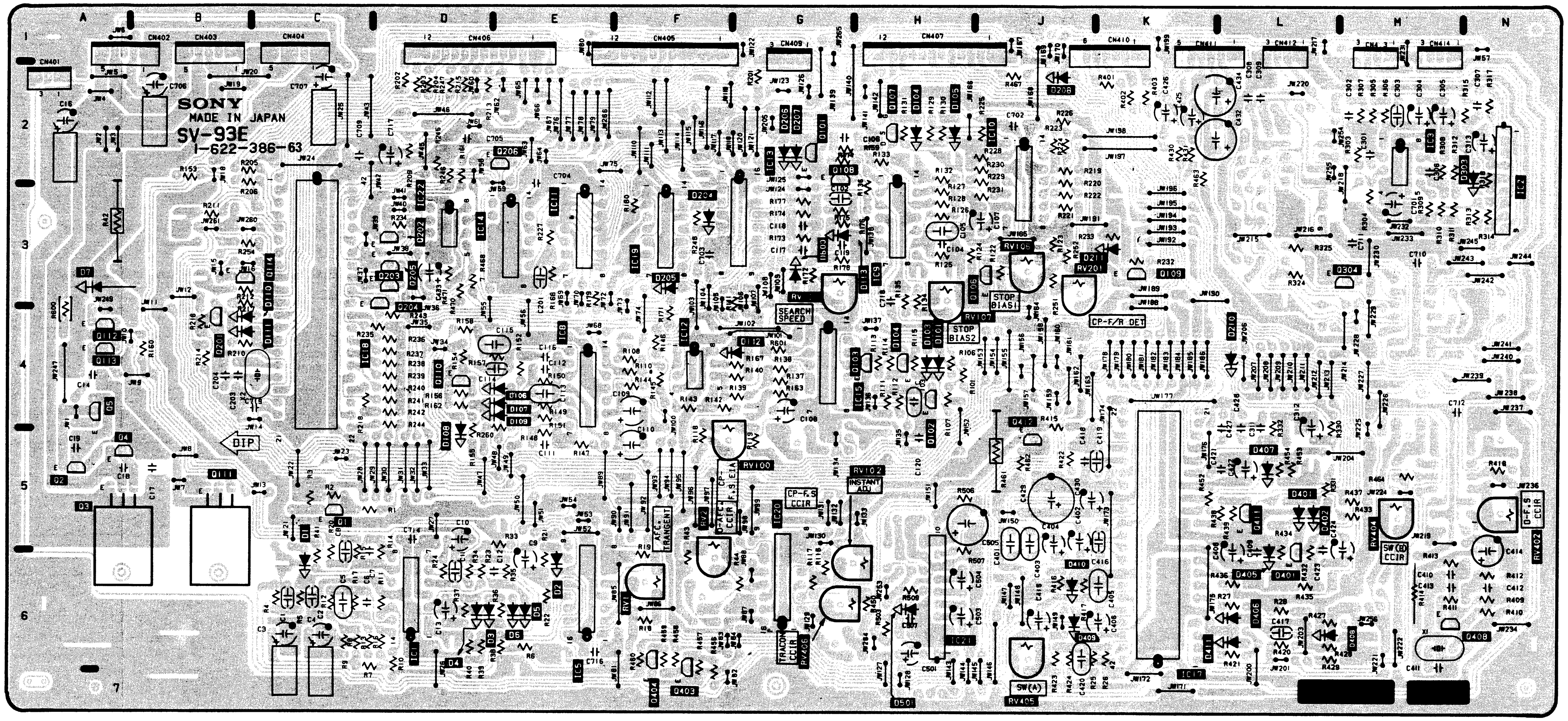
1-622-386-62
VP-9000P

SV-93E ; SERVO SYSTEM
EK ; S/N 11051 and higher

SV-93E (1-622-386-63)

CN401	A-2
CN402	A-1
CN403	B-1
CN404	C-1
CN405	F-1
CN406	D-1
CN407	H-1
CN409	G-1
CN410	K-1
CN411	K-1
CN412	L-1
CN413	M-1
CN414	M-1
D1	C-6
D2	E-6
D3	D-6
D4	D-6
D5	E-6
D6	E-6
D7	A-3
D101	H-4
D103	H-4
D104	H-2
D105	H-2
D106	E-4
D107	E-4
D108	D-5
D109	E-4
D110	B-4
D111	B-4
D112	G-4
D113	G-3
D204	F-3
D205	F-3
D206	G-2
D207	G-2
D208	J-2
D210	L-4
D211	K-3
D303	N-2
D401	L-5
D402	L-5
D405	L-5
D406	L-6
D407	L-5
D408	L-6
D409	J-6
D410	J-6
D411	L-6
D501	H-6
D600	G-3
IC1	D-6
IC2	N-2
IC3	M-2
IC5	E-6
IC8	E-4
IC9	H-3
IC10	J-2
IC11	E-3
IC12	F-4
IC13	G-3
IC14	E-3
IC15	G-4
IC17	K-5
IC18	C-3
IC19	F-3
IC20	G-6
IC21	H-6
IC22	D-3
Q1	C-5
Q2	A-5
Q3	A-5
Q4	A-5
Q5	A-4
Q101	G-2
Q102	H-4
Q103	H-4
Q104	H-4
Q106	J-3
Q107	H-2
Q108	G-2
Q109	K-3
Q110	D-4
Q111	B-5
Q112	A-4
Q113	A-4
Q114	B-3
Q201	B-4
Q202	D-3
Q203	D-3
Q204	D-3
Q205	D-3
Q206	E-2
Q304	M-3
Q401	L-5
Q403	F-6
Q404	F-6
Q408	M-6
Q411	L-5
Q412	J-5
RV1	F-6
RV2	F-6
RV100	F-5
RV101	G-3
RV102	H-6
RV106	J-3
RV107	H-3
RV201	J-3
RV402	N-5
RV404	M-5
RV405	J-6
RV406	G-6
X1	M-6
X2	C-4


A
B
C
D
E
F
G
1
2
3
4
5
6
7
CN402
CN403
CN404
CN406
CN405
CN409
SONY
MADE IN JAPAN
SV-93E
1-622-386-63
DIP
SEARCH SPEED
AFC TANGENT
RV100
CP-F.S CCIR
TRACKING CCIR
INSTANT ADJ


SONY
MADE IN JAPAN
SV-93E
1-622-386-63
SEARCH SPEED
STOP BIAS1
STOP BIAS2
CP-F/R DET
INSTANT ADJ
CP-F.S CCIR
TRACON CCIR
SW(A)
SW(B) CCIR
D-F.S CCIR
DIP

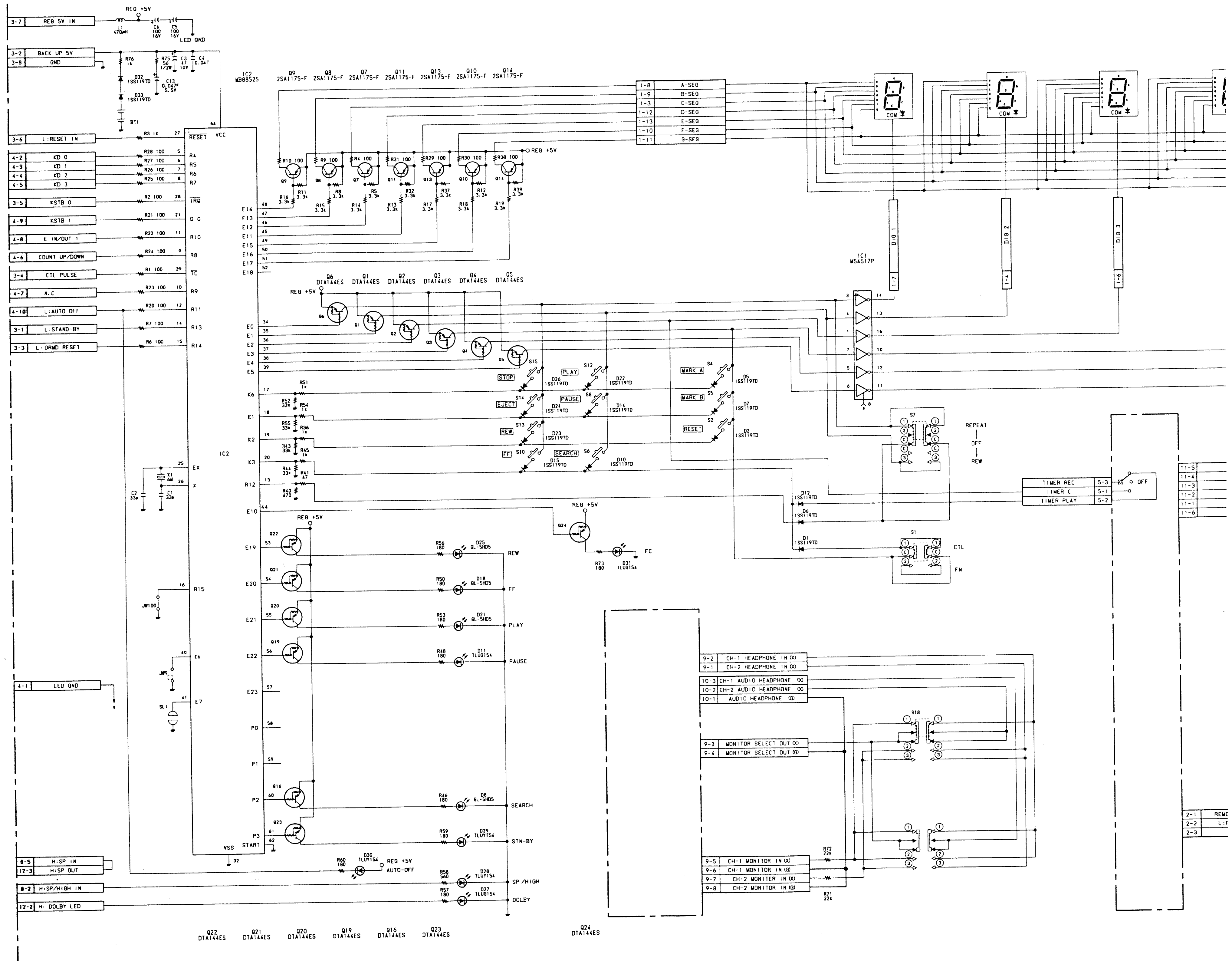
SV-93E

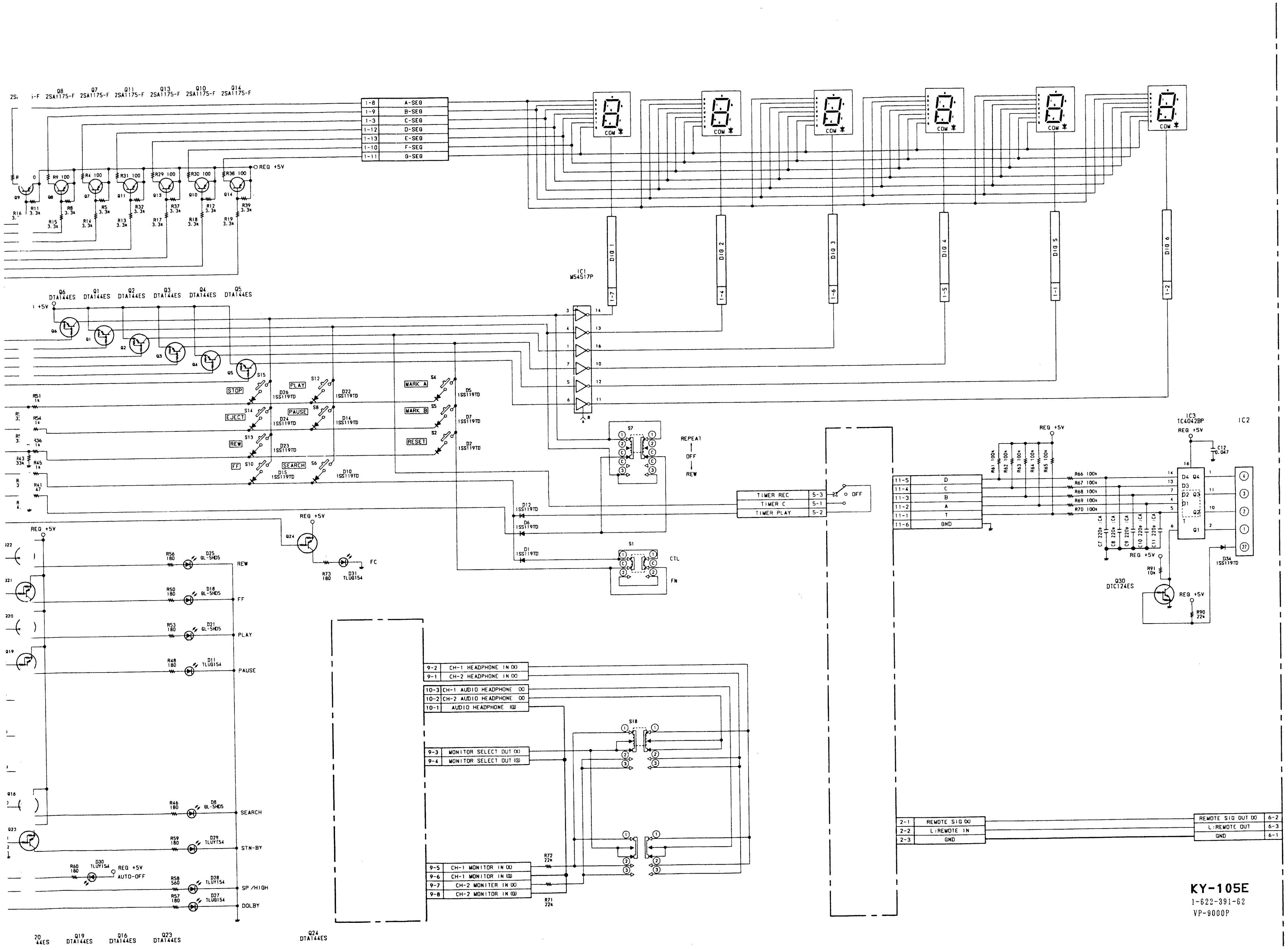
-COMPONENT SIDE-

1-622-386-63

VP-9000P

KY-105E ; FUNCTION KEY/DISPLAY
EK ; S/N 10001 thru 10350

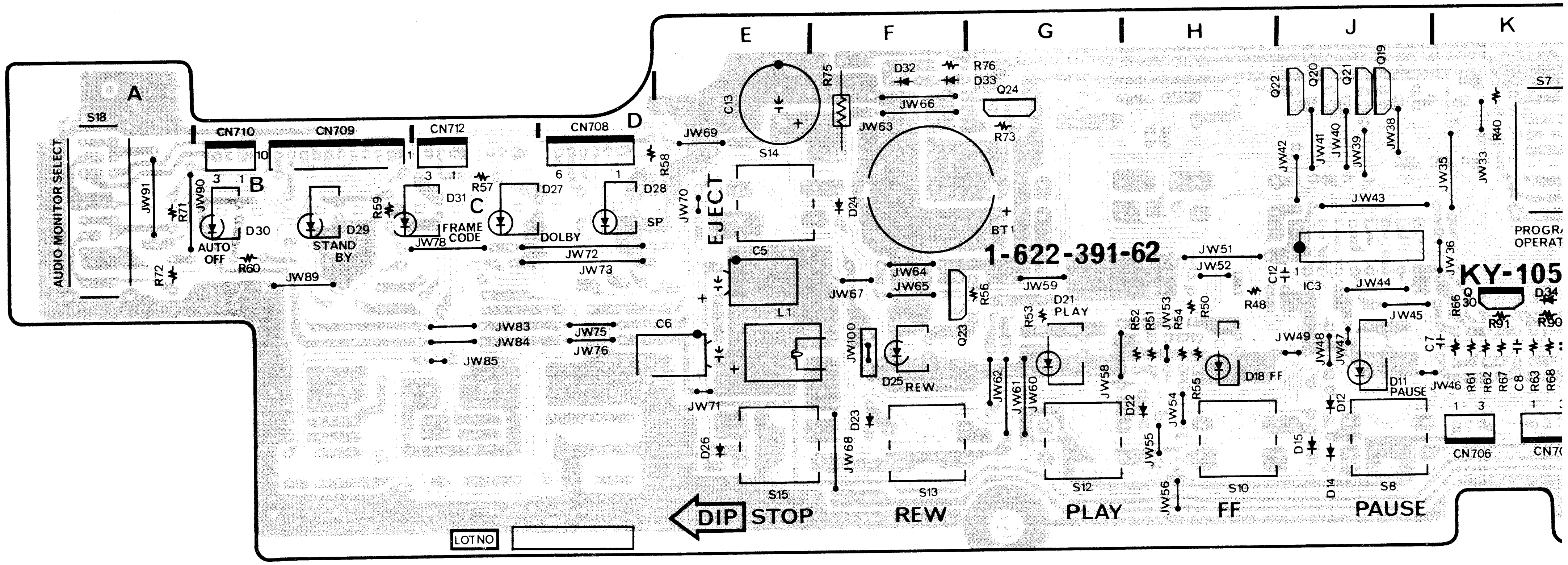

REG 5V IN
BACK UP 5V
GND
L:RESET IN
KD 0
KD 1
KD 2
KD 3
KSTB 0
KSTB 1
K IN/OUT 1
COUNT UP/DOWN
CTL PULSE
N.C
L:AUTO OFF
L:STAND-BY
L: DRWD RESET
LED GND
H:SP IN
H:SP OUT
H:SP/HIGH IN
H: DOLBY LED
IC2
MB88525
RESET
VCC
VSS
START
IC1
M54517P
A-SEG
B-SEG
C-SEG
D-SEG
E-SEG
F-SEG
G-SEG
COM
DIG 1
DIG 2
DIG 3
REG +5V
2SA1175-F
DTA144ES
STOP
PLAY
EJECT
PAUSE
REW
FF
SEARCH
MARK A
MARK B
RESET
REPEAT
OFF
REW
TIMER REC
TIMER C
TIMER PLAY
OFF
CTL
FN
FC
STN-BY
SP/HIGH
DOLBY
AUTO-OFF
CH-1 HEADPHONE IN
CH-2 HEADPHONE IN
CH-1 AUDIO HEADPHONE
CH-2 AUDIO HEADPHONE
AUDIO HEADPHONE
MONITOR SELECT OUT
MONITOR SELECT OUT
CH-1 MONITOR IN
CH-1 MONITOR IN
CH-2 MONITER IN
CH-2 MONITOR IN
1SS119TD
GL-5HD5
TLUG154
TLUY154

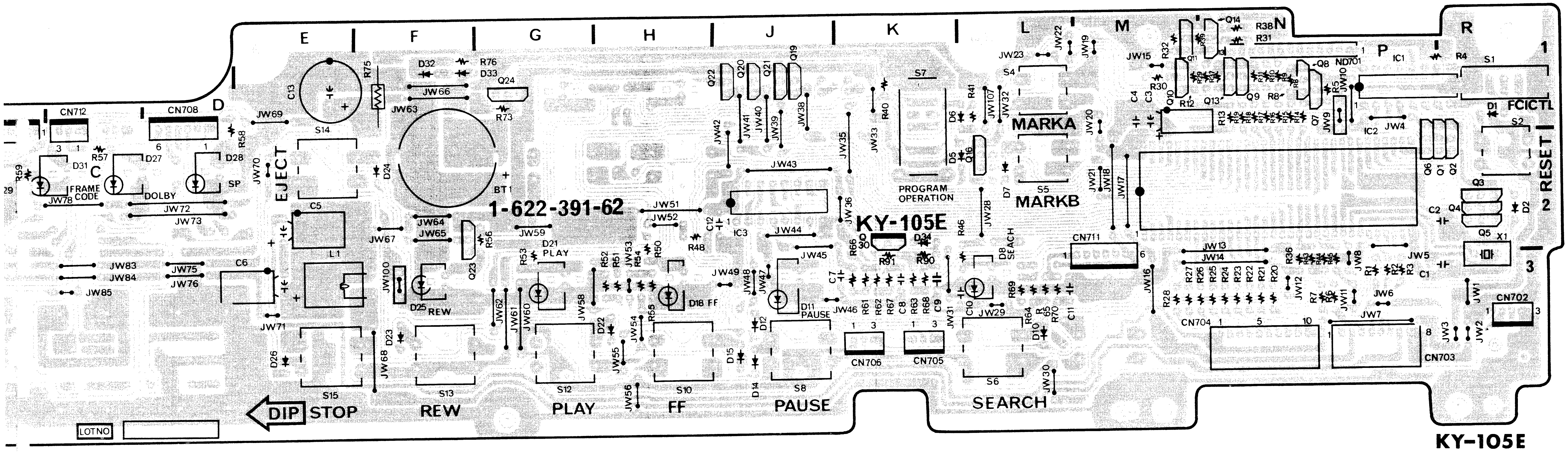

Q8 2SA1175-F
Q7 2SA1175-F
Q11 2SA1175-F
Q13 2SA1175-F
Q10 2SA1175-F
Q14 2SA1175-F
R9 100
R4 100
R31 100
R29 100
R30 100
R38 100
REG +5V
R11 3.3k
R8 3.3k
R5 3.3k
R32 3.3k
R37 3.3k
R12 3.3k
R39 3.3k
R16
R15 3.3k
R14 3.3k
R13 3.3k
R17 3.3k
R18 3.3k
R19 3.3k
1-8 A-SEG
1-9 B-SEG
1-3 C-SEG
1-12 D-SEG
1-13 E-SEG
1-10 F-SEG
1-11 G-SEG
COM
DIG 1
DIG 2
DIG 3
DIG 4
DIG 5
DIG 6
1-7
1-4
1-6
1-5
1-1
1-2
IC1 M54517P
Q6 DTA144ES
Q1 DTA144ES
Q2 DTA144ES
Q3 DTA144ES
Q4 DTA144ES
Q5 DTA144ES
+5V
S15
STOP
D26 1SS119TD
S12
PLAY
D22 1SS119TD
S14
EJECT
D24 1SS119TD
S8
PAUSE
D14 1SS119TD
S13
REW
D23 1SS119TD
S10
FF
D15 1SS119TD
S6
SEARCH
D10 1SS119TD
S4
MARK A
D5 1SS119TD
S5
MARK B
D7 1SS119TD
S2
RESET
D2 1SS119TD
R51 1k
R54 1k
R36 1k
R45 1k
R47 47
S7
REPEAT
OFF
REW
D12 1SS119TD
D6 1SS119TD
D1 1SS119TD
S1
CTL
FN
TIMER REC 5-3
TIMER C 5-1
TIMER PLAY 5-2
OFF
REG +5V
Q24
R73 180
D31 TLUG154
FC
REG +5V
R56 180
D25 GL-5HD5
REW
R50 180
D18 GL-5HD5
FF
R53 180
D21 GL-5HD5
PLAY
R48 180
D11 TLUG154
PAUSE
R46 180
D8 GL-5HD5
SEARCH
R59 180
D29 TLUY154
STN-BY
R60 180
D30 TLUY154
REG +5V
AUTO-OFF
R58 560
D28 TLUY154
SP/HIGH
R57 180
D27 TLUG154
DOLBY
Q19 DTA144ES
Q16 DTA144ES
Q23 DTA144ES
Q24 DTA144ES
9-2 CH-1 HEADPHONE IN (X)
9-1 CH-2 HEADPHONE IN (X)
10-3 CH-1 AUDIO HEADPHONE (X)
10-2 CH-2 AUDIO HEADPHONE (X)
10-1 AUDIO HEADPHONE (G)
9-3 MONITOR SELECT OUT (X)
9-4 MONITOR SELECT OUT (G)
9-5 CH-1 MONITOR IN (X)
9-6 CH-1 MONITOR IN (G)
9-7 CH-2 MONITER IN (X)
9-8 CH-2 MONITOR IN (G)
S18
R72 22k
R71 22k
11-5 D
11-4 C
11-3 B
11-2 A
11-1 T
11-6 GND
REG +5V
R61 100k
R62 100k
R63 100k
R64 100k
R65 100k
R66 100k
R67 100k
R68 100k
R69 100k
R70 100k
C7 220p :CA
C8 220p :CA
C9 220p :CA
C10 220p :CA
C11 220p :CA
IC3 TC4042BP
REG +5V
C12 0.047
IC2
D4 Q4
D3
D2 Q3
D1
Q2
T
Q1
D34 1SS119TD
REG +5V
R91 10k
Q30 DTC124ES
REG +5V
R90 22k
2-1 REMOTE SIG (X)
2-2 L:REMOTE IN
2-3 GND
REMOTE SIG OUT (X) 6-2
L:REMOTE OUT 6-3
GND 6-1
KY-105E
1-622-391-62
VP-9000P

KY-105E ; FUNCTION KEY/DISPLAY
EN ; S/N 10001 thru 10350

KY-105E (1-622-391-62)

BT1	F-2
CN702	R-3
CN703	P-3
CN704	N-3
CN705	K-3
CN706	K-3
CN708	D-1
CN709	B-1
CN710	B-1
CN711	M-3
CN712	C-1
D1	R-1
D2	R-2
D5	L-2
D6	L-1
D7	L-2
D8	L-3
D10	L-3
D11	J-3
D12	J-3
D14	J-3
D15	J-3
D18	H-3
D21	G-3
D22	H-3
D23	F-3
D24	F-2
D25	F-3
D26	E-3
D27	C-2
D28	D-2
D29	B-2
D30	B-2
D31	B-2
D32	F-1
D33	F-1
D34	K-2
ND701	N-1
IC1	P-1
IC2	N-2
IC3	J-2
Q1	R-2
Q2	R-2
Q3	R-2
Q4	R-2
Q5	R-2
Q6	P-2
Q7	N-1
Q8	N-1
Q9	N-1
Q10	M-1
Q11	M-1
Q13	N-1
Q14	N-1
Q16	L-2
Q18	J-1
Q19	J-1
Q20	J-1
Q21	J-1
Q22	J-1
Q23	F-2
Q24	G-1
Q30	K-2
S1	R-1
S2	R-2
S4	L-1
S5	L-2
S6	L-3
S7	K-1
S8	J-3
S10	H-3
S12	G-3
S13	F-3
S14	E-2
S15	E-3
S18	A-2
X1	R-3


A
B
C
D
E
F
G
H
J
K
S18
AUDIO MONITOR SELECT
CN710
CN709
CN712
CN708
D30
AUTO OFF
D29
STAND BY
D31
FRAME CODE
D27
DOLBY
D28
SP
EJECT
C13
S14
R75
D32
D33
R76
Q24
R73
BT1
1-622-391-62
C5
L1
C6
JW100
D25
REW
Q23
D21
PLAY
D18 FF
IC3
D11
PAUSE
Q22
Q20
Q21
Q19
R40
S7
PROGRA
OPERAT
KY-105
Q30
D34
CN706
CN70
S15
S13
S12
S10
S8
DIP
STOP
REW
PLAY
FF
PAUSE
LOTNO


E
F
G
H
J
K
L
M
N
P
R
D
C
1
2
3
CN712
CN708
CN702
CN703
CN704
CN705
CN706
CN711
FRAME CODE
DOLBY
SP
EJECT
S14
S15
STOP
DIP
LOTNO
S13
REW
S12
PLAY
S10
FF
S8
PAUSE
S6
SEARCH
S7
PROGRAM OPERATION
S4
MARKA
S5
MARKB
S1
S2
RESET
FCICTL
BT1
1-622-391-62
KY-105E
IC1
IC2
IC3
ND701
L1
C5
C6
C13
Q24
Q23
Q22
Q20
Q21
Q19
Q16
Q14
Q11
Q10
Q13
Q9
Q8
Q7
Q6
Q1
Q2
Q3
Q4
Q5
X1
D21 PLAY
D18 FF
D11 PAUSE
D8 SEARCH
D25 REW
JW43
JW44
JW45
JW51
JW52
JW59
JW64
JW65
JW66
JW63
JW69
JW72
JW73
JW75
JW76
JW83
JW84
JW85
JW13
JW14
JW7

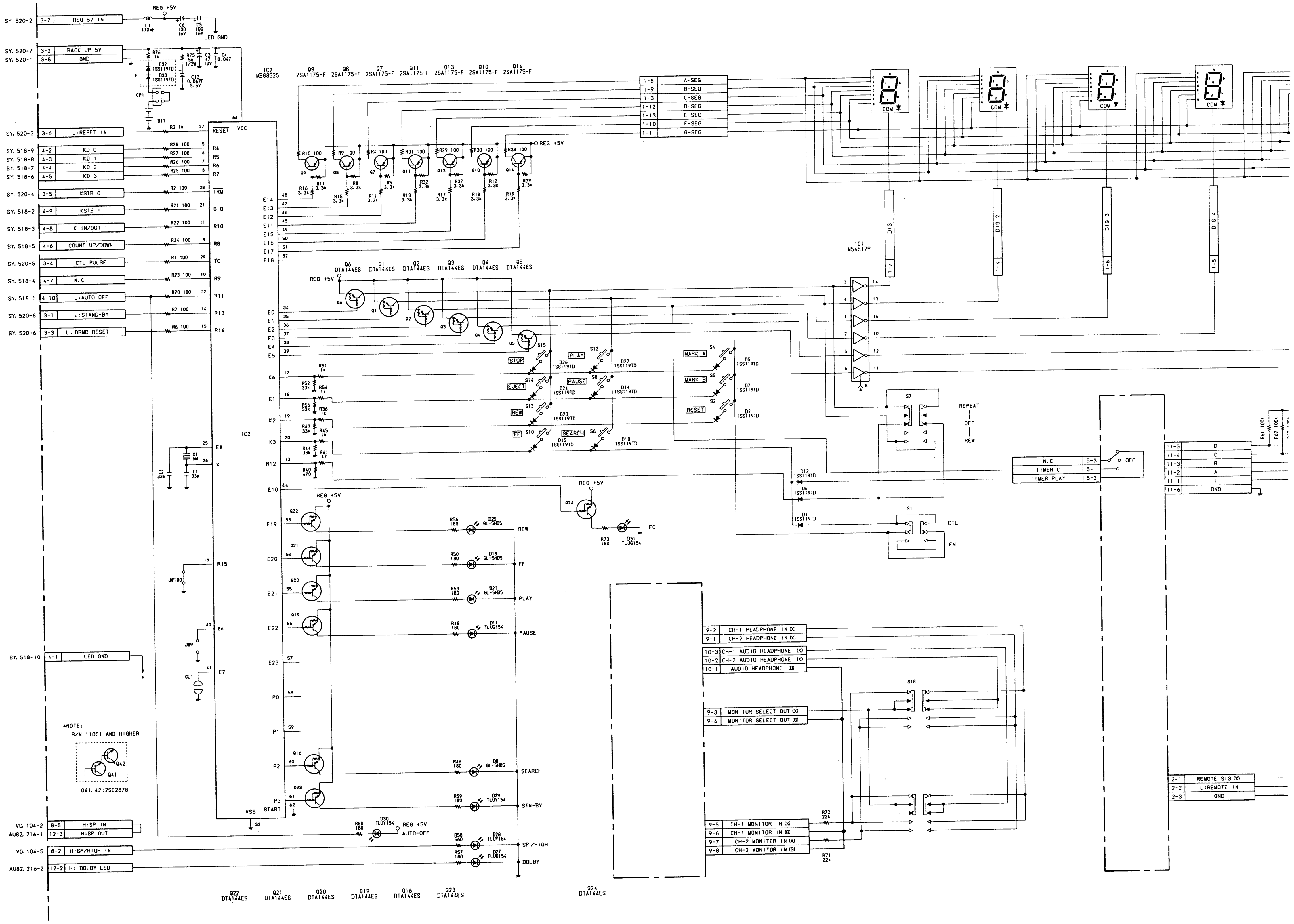
KY-105E

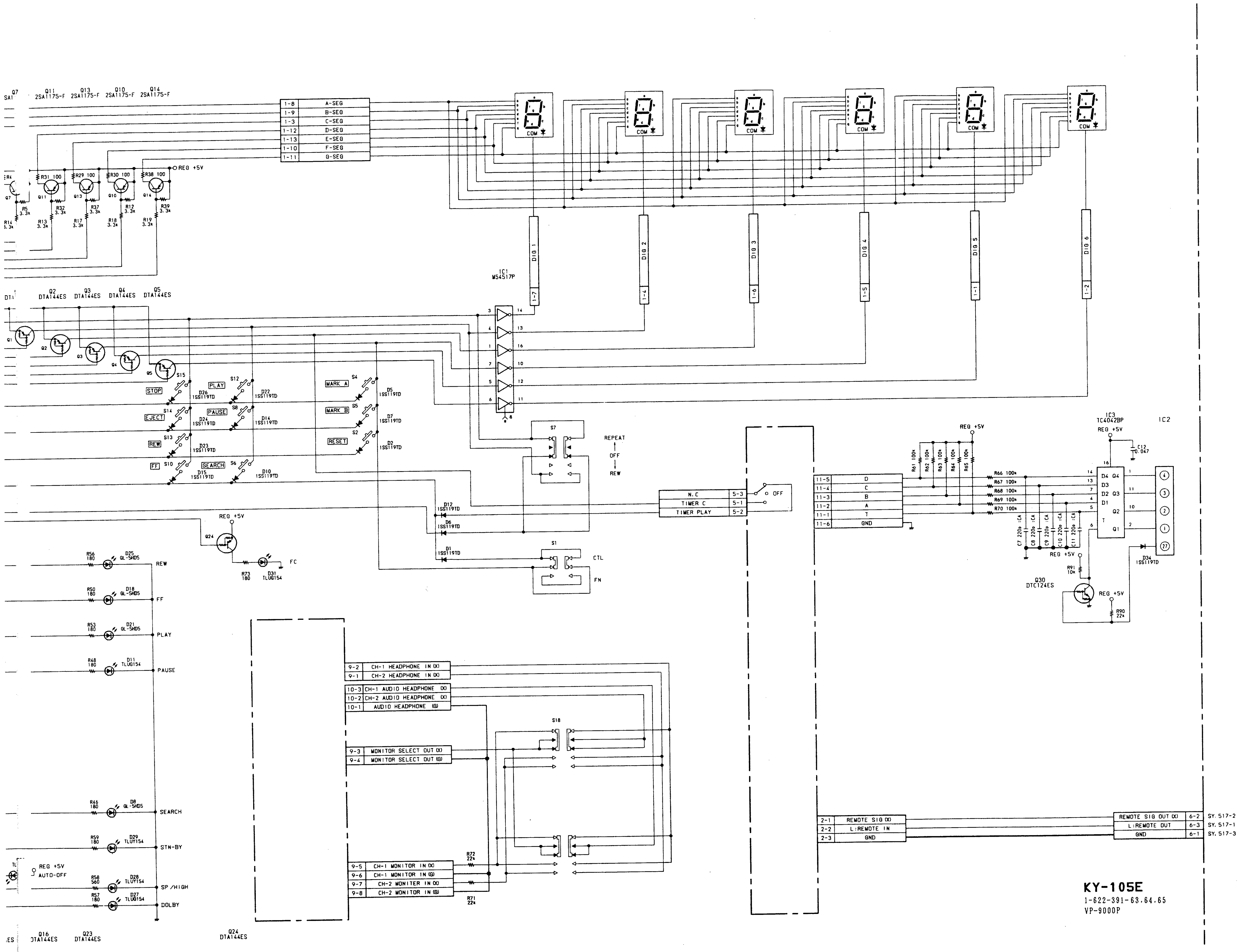
-COMPONENT SIDE-

1-622-391-62

VP-9000P

KY-105E; FUNCTION KEY/DISPLAY
EK; S/N 10351 and higher


SY. 520-2 3-7 REG 5V IN
REG +5V
L1 470μH
C6 100 16V
C5 100 16V
LED GND
SY. 520-7 3-2 BACK UP 5V
SY. 520-1 3-8 GND
R76 1k
D32 1SS119TD
D33 1SS119TD
R75 56 1/2W
C3 47 10V
C4 0.047
C13 0.047F 5.5V
CP1
BT1
IC2 MB88525
SY. 520-3 3-6 L:RESET IN
SY. 518-9 4-2 KD 0
SY. 518-8 4-3 KD 1
SY. 518-7 4-4 KD 2
SY. 518-6 4-5 KD 3
SY. 520-4 3-5 KSTB 0
SY. 518-2 4-9 KSTB 1
SY. 518-3 4-8 K IN/OUT 1
SY. 518-5 4-6 COUNT UP/DOWN
SY. 520-5 3-4 CTL PULSE
SY. 518-4 4-7 N.C
SY. 518-1 4-10 L:AUTO OFF
SY. 520-8 3-1 L:STAND-BY
SY. 520-6 3-3 L: DRMD RESET
RESET
VCC
R4
R5
R6
R7
IRQ
0 0
R10
R8
TC
R9
R11
R13
R14
EX
X
R15
E6
E7
VSS
START
E14
E13
E12
E11
E15
E16
E17
E18
E0
E1
E2
E3
E4
E5
K6
K1
K2
K3
R12
E10
E19
E20
E21
E22
E23
P0
P1
P2
P3
Q9 2SA1175-F
Q8 2SA1175-F
Q7 2SA1175-F
Q11 2SA1175-F
Q13 2SA1175-F
Q10 2SA1175-F
Q14 2SA1175-F
Q6 DTA144ES
Q1 DTA144ES
Q2 DTA144ES
Q3 DTA144ES
Q4 DTA144ES
Q5 DTA144ES
REG +5V
1-8 A-SEG
1-9 B-SEG
1-3 C-SEG
1-12 D-SEG
1-13 E-SEG
1-10 F-SEG
1-11 G-SEG
COM
DIG 1
DIG 2
DIG 3
DIG 4
IC1 M54517P
STOP
PLAY
PAUSE
EJECT
REW
FF
SEARCH
MARK A
MARK B
RESET
S15
S12
S14
S8
S13
S6
S10
S4
S5
S2
1SS119TD
S7
REPEAT
OFF
REW
N.C 5-3
TIMER C 5-1
TIMER PLAY 5-2
OFF
S1
CTL
FN
11-5 D
11-4 C
11-3 B
11-2 A
11-1 T
11-6 GND
REG +5V
Q24
FC
R73 180
D31 TLUG154
D25 GL-5HD5
REW
D18 GL-5HD5
FF
D21 GL-5HD5
PLAY
D11 TLUG154
PAUSE
D8 GL-5HD5
SEARCH
D29 TLUG154
STN-BY
R60 180
D30 TLUG154
AUTO-OFF
D28 TLUG154
SP/HIGH
D27 TLUG154
DOLBY
X1 6M
C2 33p
C1 33p
JW100
JW9
SL1
SY. 518-10 4-1 LED GND
*NOTE:
S/N 11051 AND HIGHER
Q42
Q41
Q41, 42:2SC2878
VG. 104-2 8-5 H:SP IN
AU82. 216-1 12-3 H:SP OUT
VG. 104-5 8-2 H:SP/HIGH IN
AU82. 216-2 12-2 H: DOLBY LED
Q22 DTA144ES
Q21 DTA144ES
Q20 DTA144ES
Q19 DTA144ES
Q16 DTA144ES
Q23 DTA144ES
Q24 DTA144ES
9-2 CH-1 HEADPHONE IN (X)
9-1 CH-2 HEADPHONE IN (X)
10-3 CH-1 AUDIO HEADPHONE (X)
10-2 CH-2 AUDIO HEADPHONE (X)
10-1 AUDIO HEADPHONE (G)
S18
9-3 MONITOR SELECT OUT (X)
9-4 MONITOR SELECT OUT (G)
R72 22k
9-5 CH-1 MONITOR IN (X)
9-6 CH-1 MONITOR IN (G)
9-7 CH-2 MONITER IN (X)
9-8 CH-2 MONITOR IN (G)
R71 22k
2-1 REMOTE SIG (X)
2-2 L:REMOTE IN
2-3 GND

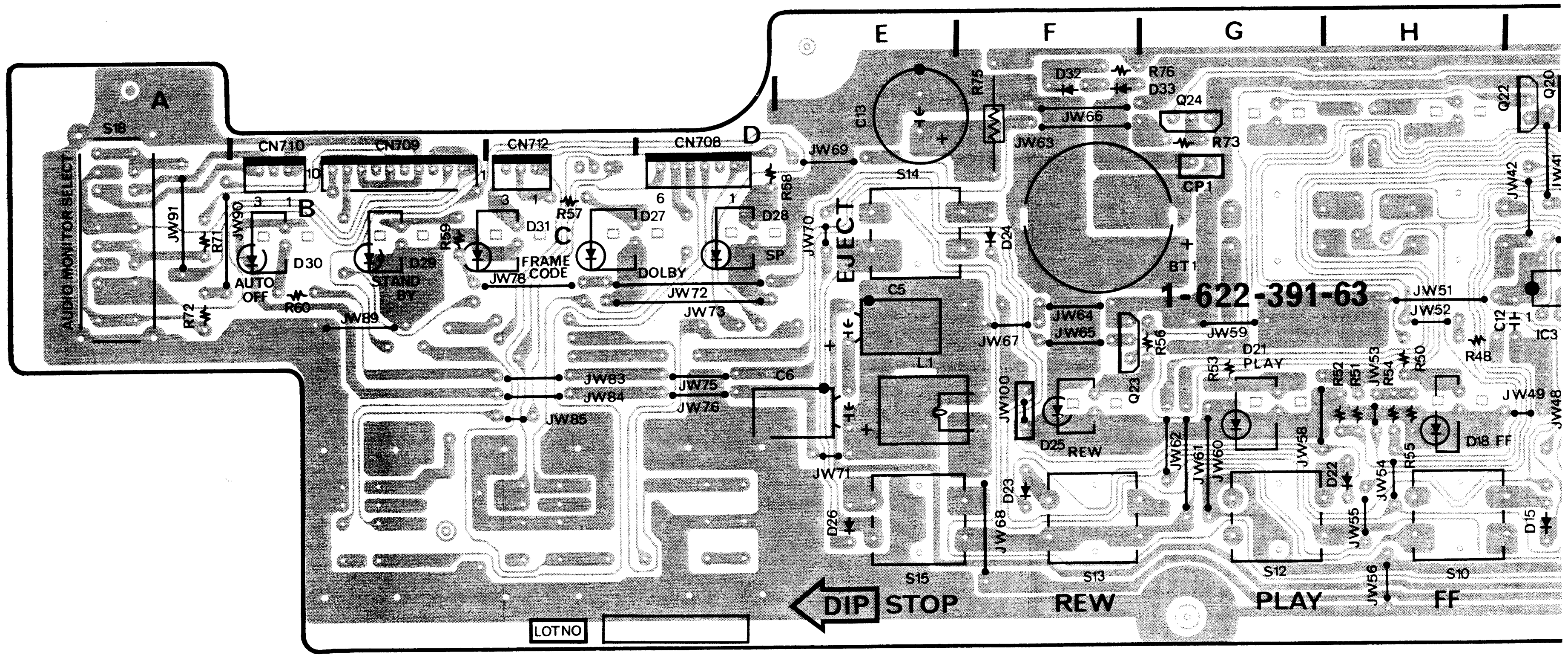

Q7
Q11 2SA1175-F
Q13 2SA1175-F
Q10 2SA1175-F
Q14 2SA1175-F
1-8 A-SEG
1-9 B-SEG
1-3 C-SEG
1-12 D-SEG
1-13 E-SEG
1-10 F-SEG
1-11 G-SEG
REG +5V
R31 100
R29 100
R30 100
R38 100
R5 3.3k
R32 3.3k
R37 3.3k
R12 3.3k
R39 3.3k
R14 3.3k
R13 3.3k
R17 3.3k
R18 3.3k
R19 3.3k
COM
DIG 1
DIG 2
DIG 3
DIG 4
DIG 5
DIG 6
1-7
1-4
1-6
1-5
1-1
1-2
IC1 M54517P
Q2 DTA144ES
Q3 DTA144ES
Q4 DTA144ES
Q5 DTA144ES
Q1
S15
STOP
D26 1SS119TD
S12
PLAY
D22 1SS119TD
S14
EJECT
D24 1SS119TD
S8
PAUSE
D14 1SS119TD
S13
REW
D23 1SS119TD
S10
FF
D15 1SS119TD
SEARCH
S6
D10 1SS119TD
MARK A
S4
D5 1SS119TD
MARK B
S5
D7 1SS119TD
RESET
S2
D2 1SS119TD
S7
REPEAT
OFF
REW
D12 1SS119TD
D6 1SS119TD
D1 1SS119TD
S1
CTL
FN
Q24
R73 180
D31 TLUG154
FC
R56 180
D25 GL-5HD5
REW
R50 180
D18 GL-5HD5
FF
R53 180
D21 GL-5HD5
PLAY
R48 180
D11 TLUG154
PAUSE
R46 180
D8 GL-5HD5
SEARCH
R59 180
D29 TLUY154
STN-BY
REG +5V
AUTO-OFF
R58 560
D28 TLUY154
SP/HIGH
R57 180
D27 TLUG154
DOLBY
Q16 DTA144ES
Q23 DTA144ES
Q24 DTA144ES
N.C 5-3
TIMER C 5-1
TIMER PLAY 5-2
OFF
11-5 D
11-4 C
11-3 B
11-2 A
11-1 T
11-6 GND
R61 100k
R62 100k
R63 100k
R64 100k
R65 100k
R66 100k
R67 100k
R68 100k
R69 100k
R70 100k
C7 220p :CA
C8 220p :CA
C9 220p :CA
C10 220p :CA
C11 220p :CA
IC3 TC4042BP
IC2
C12 0.047
D4 Q4
D3
D2 Q3
D1
Q2
T
Q1
R91 10k
Q30 DTC124ES
R90 22k
D34 1SS119TD
9-2 CH-1 HEADPHONE IN (X)
9-1 CH-2 HEADPHONE IN (X)
10-3 CH-1 AUDIO HEADPHONE (X)
10-2 CH-2 AUDIO HEADPHONE (X)
10-1 AUDIO HEADPHONE (G)
S18
9-3 MONITOR SELECT OUT (X)
9-4 MONITOR SELECT OUT (G)
R72 22k
9-5 CH-1 MONITOR IN (X)
9-6 CH-1 MONITOR IN (G)
9-7 CH-2 MONITER IN (X)
9-8 CH-2 MONITOR IN (G)
R71 22k
2-1 REMOTE SIG (X)
2-2 L:REMOTE IN
2-3 GND
REMOTE SIG OUT (X) 6-2 SY. 517-2
L:REMOTE OUT 6-3 SY. 517-1
GND 6-1 SY. 517-3

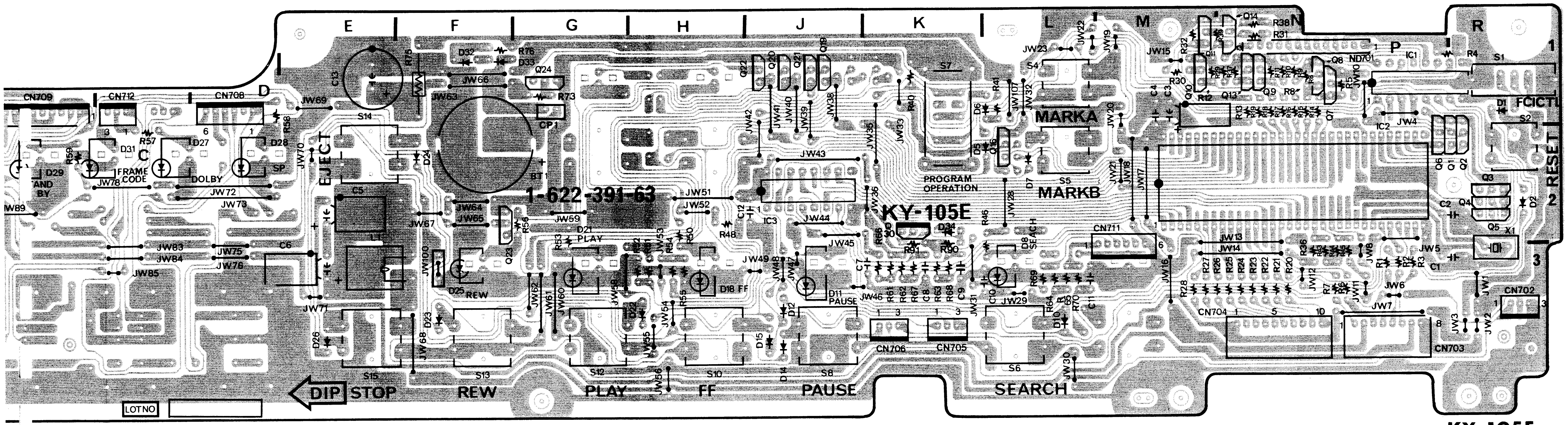
KY-105E
1-622-391-63.64.65
VP-9000P

KY-105E ; FUNCTION KEY/DISPLAY
EK ; S/N 10351 thru 10750

KY-105E (1-622-391-63)

BT1	F-2
CN702	R-3
CN703	P-3
CN704	N-3
CN705	K-3
CN706	K-3
CN708	D-1
CN709	B-1
CN710	B-1
CN711	M-3
CN712	C-1
D1	R-1
D2	R-2
D5	L-2
D6	L-1
D7	L-2
D8	L-3
D10	L-3
D11	J-3
D12	J-3
D14	J-3
D15	J-3
D18	H-3
D21	G-3
D22	H-3
D23	F-3
D24	F-2
D25	F-3
D26	E-3
D27	C-2
D28	D-2
D29	B-2
D30	B-2
D31	B-2
D32	F-1
D33	F-1
D34	K-2
ND701	N-1
IC1	P-1
IC2	N-2
IC3	J-2
Q1	R-2
Q2	R-2
Q3	R-2
Q4	R-2
Q5	R-2
Q6	P-2
Q7	N-1
Q8	N-1
Q9	N-1
Q10	M-1
Q11	M-1
Q13	N-1
Q14	N-1
Q16	L-2
Q19	J-1
Q20	J-1
Q21	J-1
Q22	J-1
Q23	F-2
Q24	G-1
Q30	K-2
S1	R-1
S2	R-2
S4	L-1
S5	L-2
S6	L-3
S7	K-1
S8	J-3
S10	H-3
S12	G-3
S13	F-3
S14	E-2
S15	E-3
S18	A-2
X1	R-3


A
B
C
D
E
F
G
H
S18
AUDIO MONITOR SELECT
JW91
R71
R72
JW90
D30
AUTO OFF
R60
CN710
CN709
D29
STAND BY
JW89
CN712
R59
D31
FRAME CODE
JW78
R57
CN708
D27
DOLBY
D28
SP
R58
JW72
JW73
JW83
JW84
JW85
JW75
JW76
C6
JW69
JW70
EJECT
S14
C13
R75
D24
C5
L1
JW71
D26
S15
STOP
JW67
JW100
JW68
D23
D32
D33
R76
JW66
JW63
Q24
R73
CP1
BT1
1-622-391-63
JW64
JW65
R56
Q23
D25
REW
S13
REW
JW59
JW62
JW61
JW60
R53
D21
PLAY
JW58
D22
S12
PLAY
R52
R51
JW53
R54
R50
R55
JW54
JW55
JW56
D18 FF
S10
FF
D15
JW51
JW52
R48
C12
IC3
JW49
JW48
JW42
JW41
Q22
Q20
DIP
LOT NO


E
F
G
H
J
K
L
M
N
P
R
D
C
1
2
3
CN709
CN712
CN708
D29
D31
FRAME CODE
D27
DOLBY
D28
SP
EJECT
S14
C13
R75
D32
D33
R76
JW66
JW63
Q24
R73
CP1
BT1
1-622-391-63
C5
C6
JW64
JW65
JW59
D21 PLAY
D25 REW
D18 FF
D11 PAUSE
D8 SEACH
JW51
JW52
JW43
JW44
JW45
IC3
KY-105E
S7
PROGRAM OPERATION
MARKA
MARKB
S4
S5
CN711
IC1
IC2
ND701
FCICTL
S1
S2
RESET
Q3
Q4
Q5
X1
C1
C2
CN702
CN703
CN704
JW7
CN706
CN705
S15
S13
S12
S10
S8
S6
DIP
STOP
REW
PLAY
FF
PAUSE
SEARCH
LOTNO

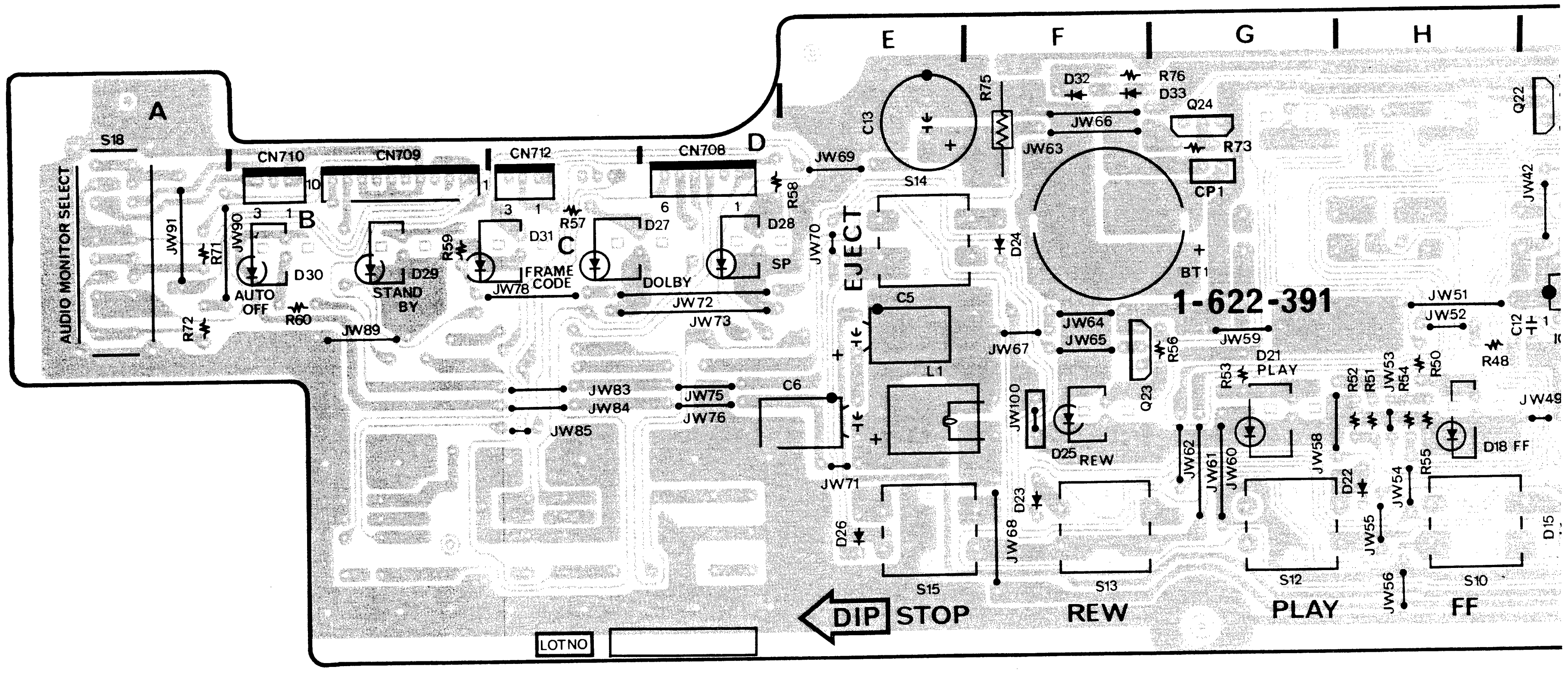
KY-105E

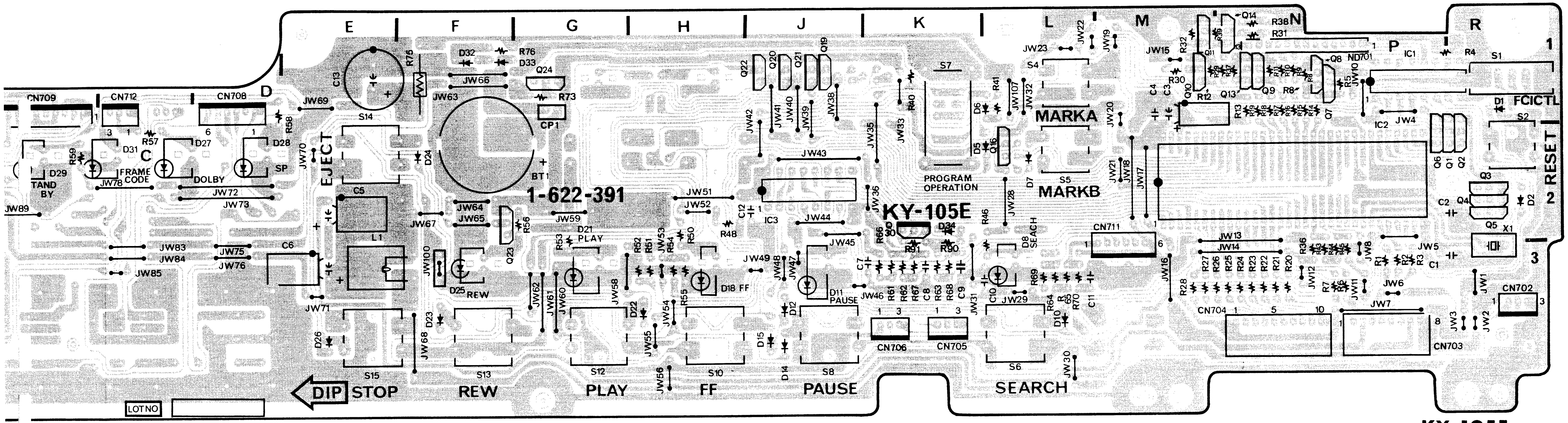
-COMPONENT SIDE-
1-622-391-63
VP-9000P

KY-105E; FUNCTION KEY/DISPLAY EK; S/N 10751 thru 11050

KY-105E (1-622-391-64)

BT1	F-2
CN702	R-3
CN703	P-3
CN704	N-3
CN705	K-3
CN706	K-3
CN708	D-1
CN709	B-1
CN710	B-1
CN711	M-3
CN712	C-1
D1	R-1
D2	R-2
D5	L-2
D6	L-1
D7	L-2
D8	L-3
D10	L-3
D11	J-3
D12	J-3
D14	J-3
D15	J-3
D18	H-3
D21	G-3
D22	H-3
D23	F-3
D24	F-2
D25	F-3
D26	E-3
D27	C-2
D28	D-2
D29	B-2
D30	B-2
D31	B-2
D32	F-1
D33	F-1
D34	K-2
ND701	N-1
IC1	P-1
IC2	N-2
IC3	J-2
Q1	R-2
Q2	R-2
Q3	R-2
Q4	R-2
Q5	R-2
Q6	P-2
Q7	N-1
Q8	N-1
Q9	N-1
Q10	M-1
Q11	M-1
Q13	N-1
Q14	N-1
Q16	L-2
Q19	J-1
Q20	J-1
Q21	J-1
Q22	J-1
Q23	F-2
Q24	G-1
Q30	K-2
S1	R-1
S2	R-2
S4	L-1
S5	L-2
S6	L-3
S7	K-1
S8	J-3
S10	H-3
S12	G-3
S13	F-3
S14	E-2
S15	E-3
S18	A-2
X1	R-3


A
B
C
D
E
F
G
H
AUDIO MONITOR SELECT
S18
CN710
CN709
CN712
CN708
AUTO OFF
STAND BY
FRAME CODE
DOLBY
SP
EJECT
D30
D29
D31
D27
D28
R71
R72
R60
R59
R57
R58
JW91
JW90
JW89
JW78
JW72
JW73
JW69
JW70
JW83
JW84
JW85
JW75
JW76
C5
C6
C13
L1
S14
R75
D32
D33
R76
Q24
R73
JW66
JW63
CP1
D24
BT1
1-622-391
JW67
JW64
JW65
R56
Q23
JW59
JW100
D25
REW
D21
PLAY
R53
R52
R51
JW53
R54
R50
R48
D18 FF
JW62
JW61
JW60
JW58
D22
JW54
R55
JW55
JW56
JW71
D23
D26
JW68
S15
S13
S12
S10
DIP
STOP
REW
PLAY
FF
LOT NO
Q22
JW42
JW51
JW52
C12
JW49
D15


E
F
G
H
J
K
L
M
N
P
R
D
C
1
2
3
CN709
CN712
CN708
CN711
CN706
CN705
CN704
CN703
CN702
ND701
IC1
IC2
IC3
S1
S2
S4
S5
S6
S7
S8
S10
S12
S13
S14
S15
BT1
CP1
L1
X1
C5
C6
C13
1-622-391
KY-105E
EJECT
STAND BY
FRAME CODE
DOLBY
SP
DIP
STOP
REW
PLAY
FF
PAUSE
SEARCH
PROGRAM OPERATION
MARKA
MARKB
FCICTL
RESET
LOTNO

KY-105E

-COMPONENT SIDE-

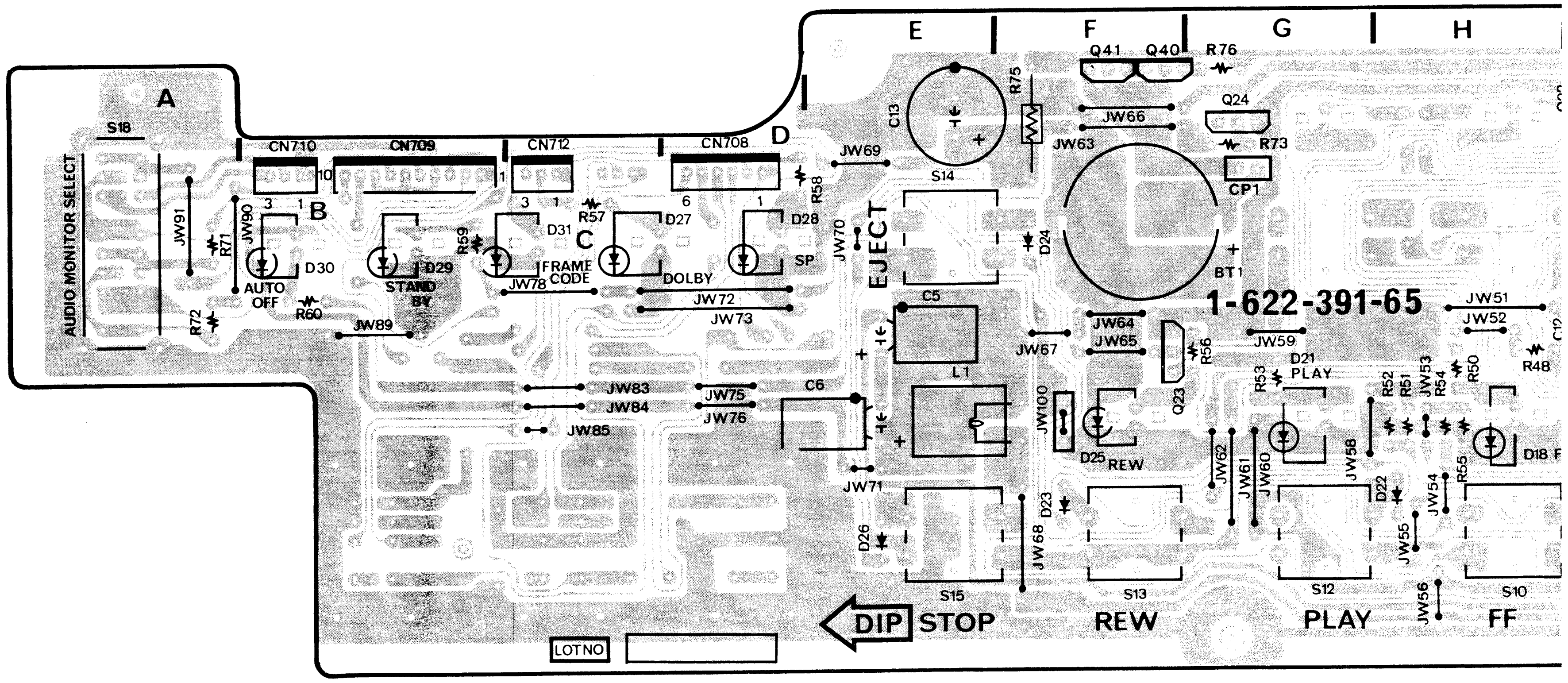
1-622-391-64

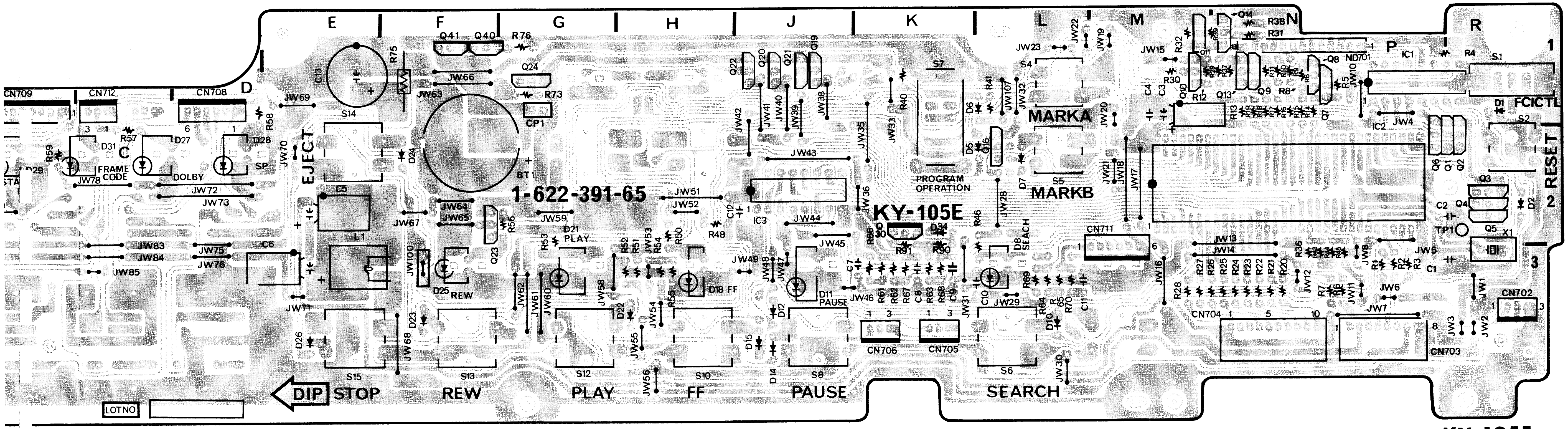
VP-9000P

KY-105E; FUNCTION KEY/DISPLAY
EK; S/N 11051 and higher

KY-105E (1-622-391-65)

BT1	F-2
CN702	R-3
CN703	P-3
CN704	N-3
CN705	K-3
CN706	K-3
CN708	D-1
CN709	B-1
CN710	B-1
CN711	M-3
CN712	C-1
CP1	G-1
D1	R-1
D2	R-2
D5	L-2
D6	L-1
D7	L-2
D8	L-3
D10	L-3
D11	J-3
D12	J-3
D14	J-3
D15	J-3
D18	H-3
D21	G-3
D22	H-3
D23	F-3
D24	F-2
D25	F-3
D26	E-3
D27	C-2
D28	D-2
D29	B-2
D30	B-2
D31	B-2
D34	K-2
ND701	N-1
IC1	P-1
IC2	N-2
IC3	J-2
Q1	R-2
Q2	R-2
Q3	R-2
Q4	R-2
Q5	R-2
Q6	P-2
Q7	N-1
Q8	N-1
Q9	N-1
Q10	M-1
Q11	M-1
Q13	N-1
Q14	N-1
Q16	L-2
Q19	J-1
Q20	J-1
Q21	J-1
Q22	J-1
Q23	F-2
Q24	G-1
Q30	K-2
Q40	F-1
Q41	F-1
S1	R-1
S2	R-2
S4	L-1
S5	L-2
S6	L-3
S7	K-1
S8	J-3
S10	H-3
S12	G-3
S13	F-3
S14	E-2
S15	E-3
S18	A-2
TP1	R-2
X1	R-3


A
B
C
D
E
F
G
H
S18
AUDIO MONITOR SELECT
JW91
JW90
R71
R72
D30
AUTO OFF
R60
CN710
CN709
D29
STAND BY
JW89
R59
CN712
R57
D31
FRAME CODE
JW78
CN708
D27
DOLBY
D28
SP
R58
JW72
JW73
JW83
JW84
JW85
JW75
JW76
C6
JW69
JW70
EJECT
C13
S14
R75
JW63
Q41
Q40
R76
JW66
Q24
R73
CP1
D24
BT1
1-622-391-65
C5
L1
JW67
JW64
JW65
R56
Q23
JW59
JW51
JW52
R48
D21
PLAY
R53
R52
R51
JW53
R54
R50
JW100
D25
REW
JW71
JW62
JW61
JW60
JW58
D22
JW54
R55
D18
D23
D26
JW68
JW55
JW56
S15
S13
S12
S10
DIP
STOP
REW
PLAY
FF
LOT NO


E
F
G
H
J
K
L
M
N
P
R
C
D
1
2
3
CN709
CN712
CN708
CN711
CN704
CN703
CN702
CN706
CN705
ND701
IC1
IC2
IC3
BT1
CP1
S14
S15
S13
S12
S10
S8
S6
S7
S4
S5
S1
S2
X1
TP1
L1
C5
C6
1-622-391-65
KY-105E
EJECT
FRAME CODE
DOLBY
SP
REW
PLAY
FF
PAUSE
SEARCH
MARKA
MARKB
PROGRAM OPERATION
FCICTL
RESET
DIP
STOP
LOT NO

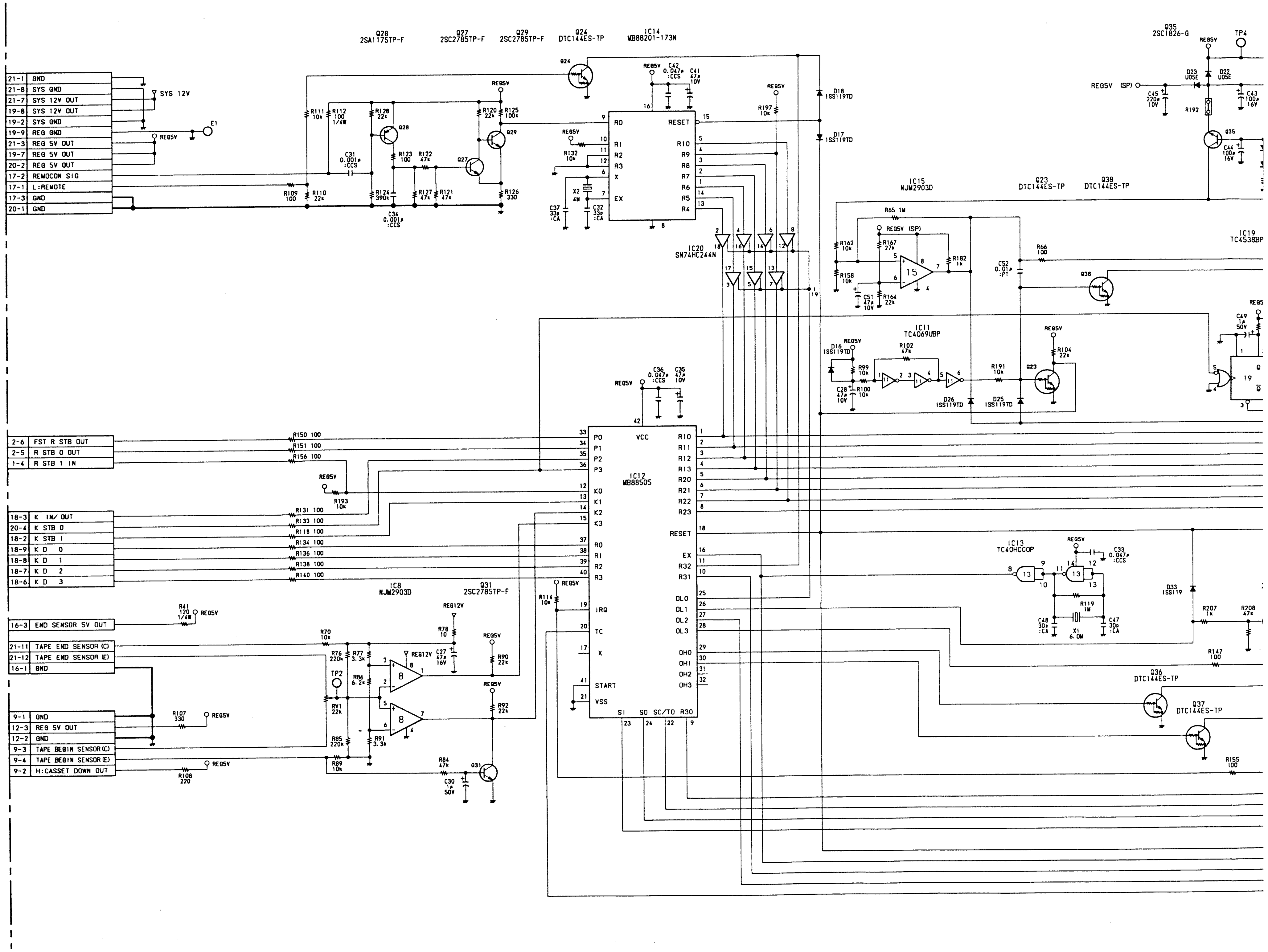
KY-105E

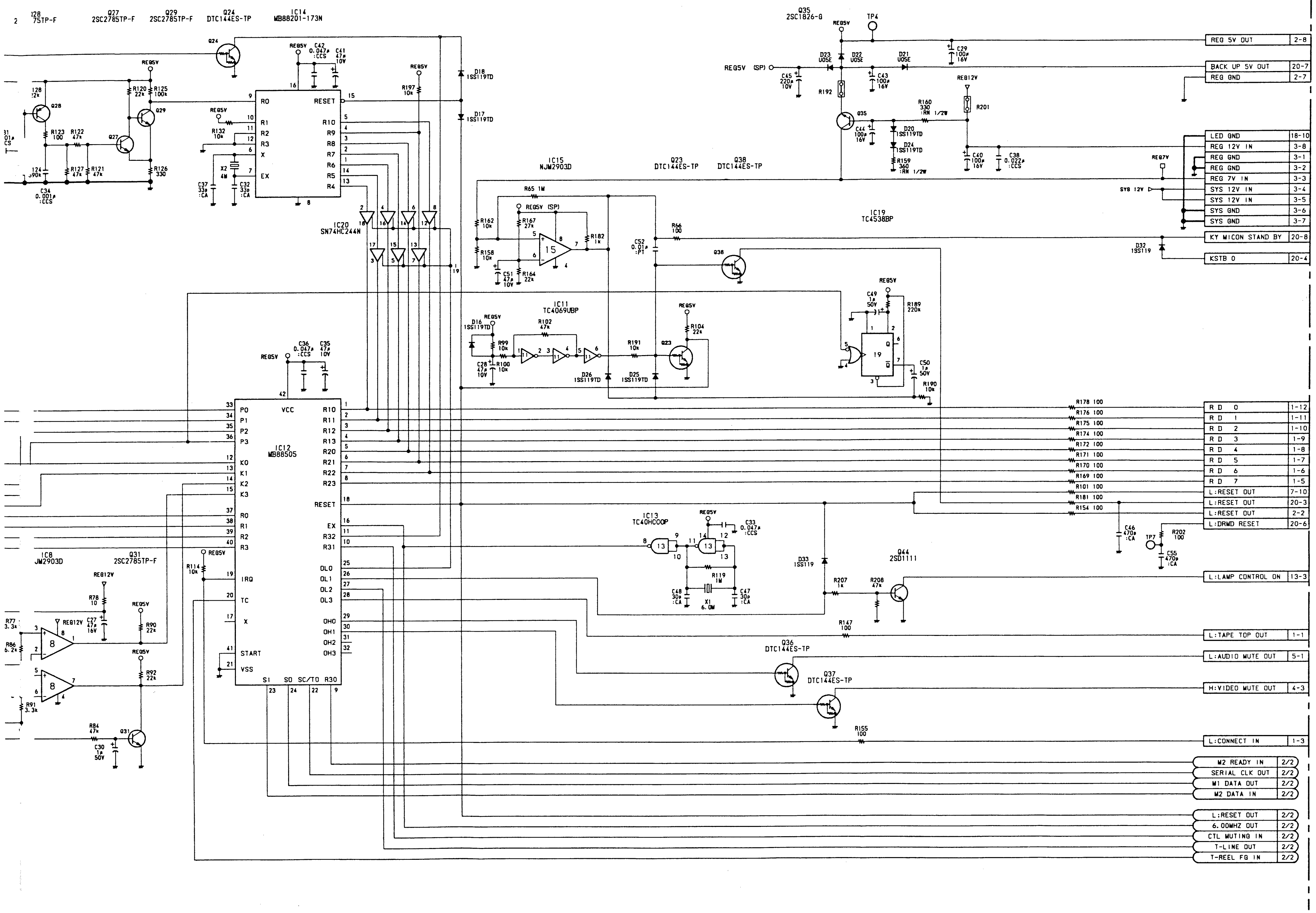
-COMPONENT SIDE-

1-622-391-65

VP-9000P

SY-106A(½); SYSTEM CONTROL
EK: S/N 10001 thru 10750

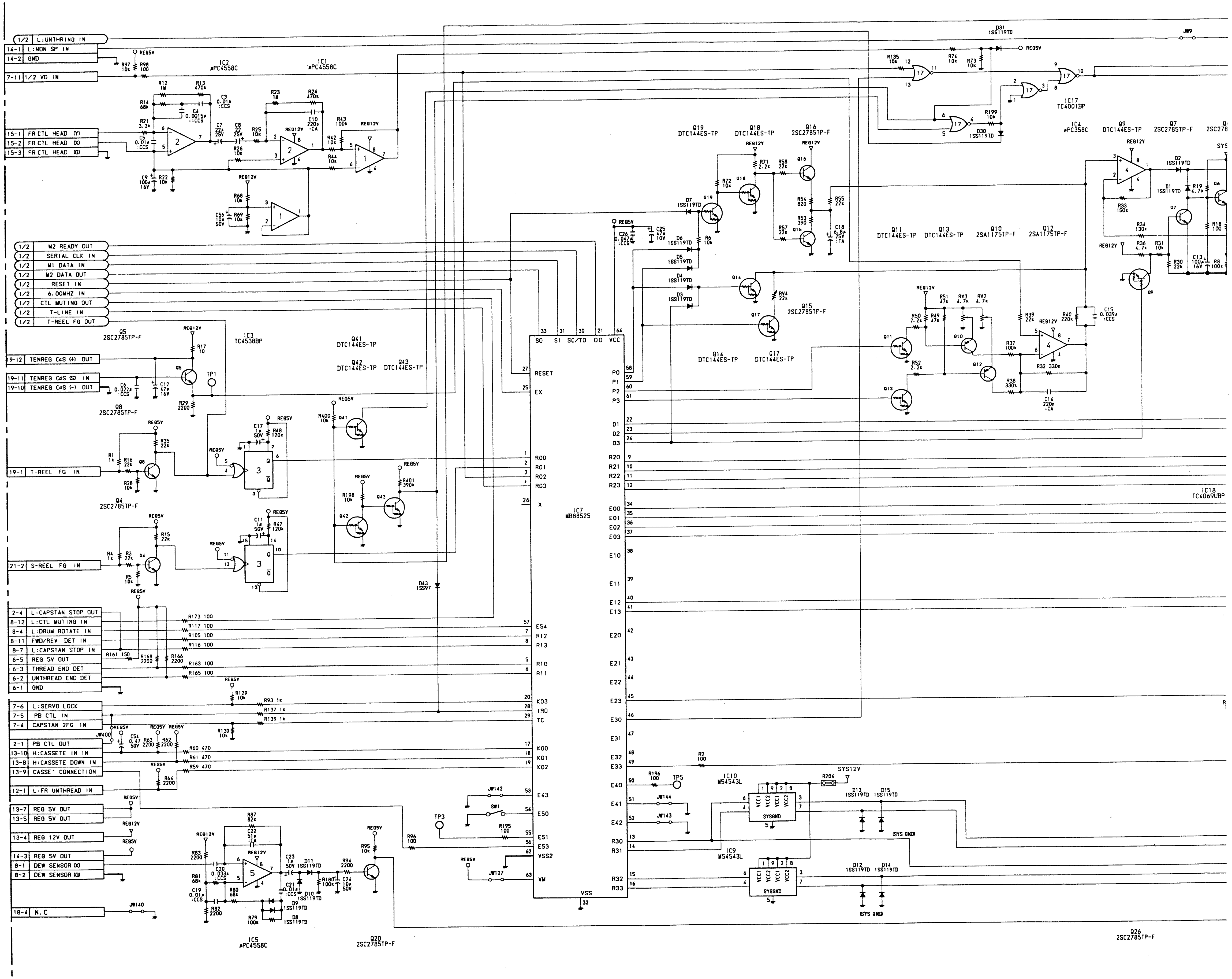

21-1 GND
21-8 SYS GND
21-7 SYS 12V OUT
19-8 SYS 12V OUT
19-2 SYS GND
19-9 REG GND
21-3 REG 5V OUT
19-7 REG 5V OUT
20-2 REG 5V OUT
17-2 REMOCON SIG
17-1 L:REMOTE
17-3 GND
20-1 GND
SYS 12V
E1
REG5V
2-6 FST R STB OUT
2-5 R STB 0 OUT
1-4 R STB 1 IN
18-3 K IN/ OUT
20-4 K STB 0
18-2 K STB 1
18-9 K D 0
18-8 K D 1
18-7 K D 2
18-6 K D 3
16-3 END SENSOR 5V OUT
21-11 TAPE END SENSOR (C)
21-12 TAPE END SENSOR (E)
16-1 GND
9-1 GND
12-3 REG 5V OUT
12-2 GND
9-3 TAPE BEGIN SENSOR (C)
9-4 TAPE BEGIN SENSOR (E)
9-2 H:CASSET DOWN OUT
Q28 2SA1175TP-F
Q27 2SC2785TP-F
Q29 2SC2785TP-F
Q24 DTC144ES-TP
IC14 MB88201-173N
IC20 SN74HC244N
IC15 NJM2903D
Q23 DTC144ES-TP
Q38 DTC144ES-TP
Q35 2SC1826-Q
TP4
IC19 TC4538BP
IC11 TC4069UBP
IC12 MB8850S
IC8 NJM2903D
Q31 2SC2785TP-F
IC13 TC40HC00P
Q36 DTC144ES-TP
Q37 DTC144ES-TP
D18 1SS119TD
D17 1SS119TD
D16 1SS119TD
D26 1SS119TD
D25 1SS119TD
D23 U05E
D22 U05E
D33 1SS119
REG5V (SP)
REG12V
TP2
X1 6.0M
X2 4M
P0
P1
P2
P3
K0
K1
K2
K3
R0
R1
R2
R3
IRQ
TC
X
START
VSS
VCC
R10
R11
R12
R13
R20
R21
R22
R23
RESET
EX
R32
R31
OL0
OL1
OL2
OL3
OH0
OH1
OH2
OH3
SI
SO
SC/TO
R30

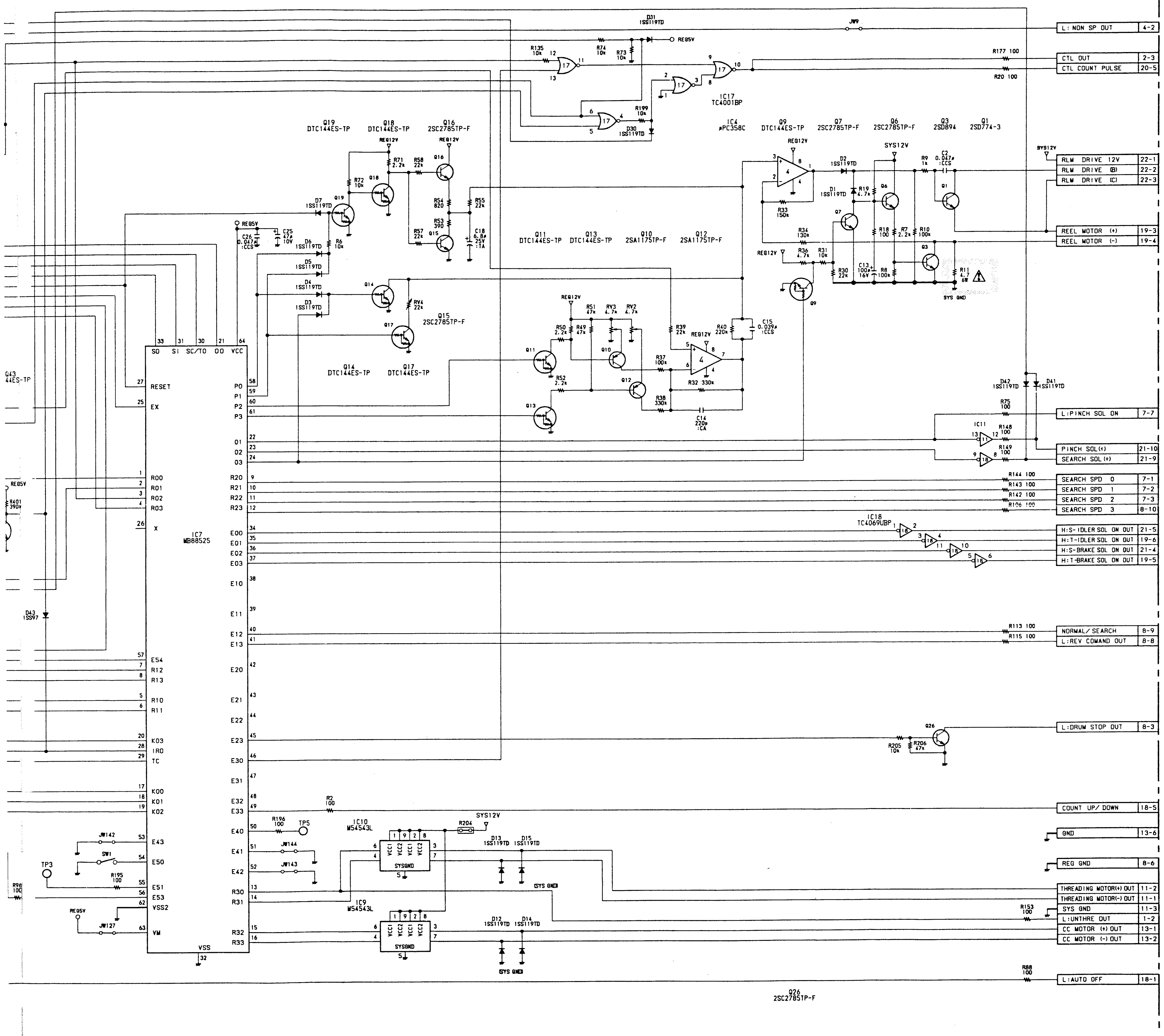

IC14
MB88201-173N
IC20
SN74HC244N
IC12
MB88505
IC15
NJM2903D
IC11
TC4069UBP
IC19
TC4538BP
IC13
TC40HC00P
IC8
JM2903D
Q24 DTC144ES-TP
Q27 2SC2785TP-F
Q29 2SC2785TP-F
Q31 2SC2785TP-F
Q35 2SC1826-Q
Q23 DTC144ES-TP
Q38 DTC144ES-TP
Q36 DTC144ES-TP
Q37 DTC144ES-TP
Q44 2SD1111
REG5V
REG12V
REG5V (SP)
TP4
TP7
X1 6.0M
X2 4M
REG 5V OUT 2-8
BACK UP 5V OUT 20-7
REG GND 2-7
LED GND 18-10
REG 12V IN 3-8
REG GND 3-1
REG GND 3-2
REG 7V IN 3-3
SYS 12V IN 3-4
SYS 12V IN 3-5
SYS GND 3-6
SYS GND 3-7
KY MICON STAND BY 20-8
KSTB 0 20-4
R D 0 1-12
R D 1 1-11
R D 2 1-10
R D 3 1-9
R D 4 1-8
R D 5 1-7
R D 6 1-6
R D 7 1-5
L:RESET OUT 7-10
L:RESET OUT 20-3
L:RESET OUT 2-2
L:DRWD RESET 20-6
L:LAMP CONTROL ON 13-3
L:TAPE TOP OUT 1-1
L:AUDIO MUTE OUT 5-1
H:VIDEO MUTE OUT 4-3
L:CONNECT IN 1-3
M2 READY IN 2/2
SERIAL CLK OUT 2/2
M1 DATA OUT 2/2
M2 DATA IN 2/2
L:RESET OUT 2/2
6.00MHZ OUT 2/2
CTL MUTING IN 2/2
T-LINE OUT 2/2
T-REEL FG IN 2/2

SY-106A (1/2)

1-622-389-22
VP-9000
VP-9000P

SY-106A(2/2); SYSTEM CONTROL
EK; S/N 10001 thru 10750


1/2 L:UNTHRING IN
14-1 L:NON SP IN
14-2 GND
7-11 1/2 VD IN
15-1 FR CTL HEAD (M)
15-2 FR CTL HEAD (X)
15-3 FR CTL HEAD (G)
1/2 M2 READY OUT
1/2 SERIAL CLK IN
1/2 M1 DATA IN
1/2 M2 DATA OUT
1/2 RESET IN
1/2 6.00MHZ IN
1/2 CTL MUTING OUT
1/2 T-LINE IN
1/2 T-REEL FG OUT
19-12 TENREG C&S (+) OUT
19-11 TENREG C&S (S) IN
19-10 TENREG C&S (-) OUT
19-1 T-REEL FG IN
21-2 S-REEL FG IN
2-4 L:CAPSTAN STOP OUT
8-12 L:CTL MUTING IN
8-4 L:DRUM ROTATE IN
8-11 FWD/REV DET IN
8-7 L:CAPSTAN STOP IN
6-5 REG 5V OUT
6-3 THREAD END DET
6-2 UNTHREAD END DET
6-1 GND
7-6 L:SERVO LOCK
7-5 PB CTL IN
7-4 CAPSTAN 2FG IN
2-1 PB CTL OUT
13-10 H:CASSETE IN IN
13-8 H:CASSETE DOWN IN
13-9 CASSE' CONNECTION
12-1 L:FR UNTHREAD IN
13-7 REG 5V OUT
13-5 REG 5V OUT
13-4 REG 12V OUT
14-3 REG 5V OUT
8-1 DEW SENSOR (X)
8-2 DEW SENSOR (G)
18-4 N.C
IC1 μPC4558C
IC2 μPC4558C
IC3 TC4538BP
IC4 μPC358C
IC5 μPC4558C
IC7 MB88525
IC9 M54543L
IC10 M54543L
IC17 TC4001BP
IC18 TC4069UBP
Q5 2SC2785TP-F
Q8 2SC2785TP-F
Q4 2SC2785TP-F
Q41 DTC144ES-TP
Q42 DTC144ES-TP
Q43 DTC144ES-TP
Q19 DTC144ES-TP
Q18 DTC144ES-TP
Q16 2SC2785TP-F
Q14 DTC144ES-TP
Q17 DTC144ES-TP
Q15 2SC2785TP-F
Q11 DTC144ES-TP
Q13 DTC144ES-TP
Q10 2SA1175TP-F
Q12 2SA1175TP-F
Q9 DTC144ES-TP
Q7 2SC2785TP-F
Q20 2SC2785TP-F
Q26 2SC2785TP-F
D43 1SS97
D31 1SS119TD
REG5V
REG12V
SYS12V
SYS GND
TP1
TP3
TP5
SW1


IC7
MB88525
RESET
EX
X
VSS
VCC
SO SI SC/TO OO
IC17
TC4001BP
IC4
μPC358C
IC18
TC4069UBP
IC10
M54543L
IC9
M54543L
IC11
Q19 DTC144ES-TP
Q18 DTC144ES-TP
Q16 2SC2785TP-F
Q9 DTC144ES-TP
Q7 2SC2785TP-F
Q6 2SC2785TP-F
Q3 2SD894
Q1 2SD774-3
Q11 DTC144ES-TP
Q13 DTC144ES-TP
Q10 2SA1175TP-F
Q12 2SA1175TP-F
Q15 2SC2785TP-F
Q14 DTC144ES-TP
Q17 DTC144ES-TP
Q26 2SC2785TP-F
D31 1SS119TD
D30 1SS119TD
D7 1SS119TD
D6 1SS119TD
D5 1SS119TD
D4 1SS119TD
D3 1SS119TD
D2 1SS119TD
D1 1SS119TD
D42 1SS119TD
D41 1SS119TD
D13 1SS119TD
D15 1SS119TD
D12 1SS119TD
D14 1SS119TD
D43 1SS97
REG5V
REG12V
SYS12V
SYS GND
JW9
JW142
JW144
JW143
JW127
SW1
TP3
TP5
R204
L: NON SP OUT 4-2
CTL OUT 2-3
CTL COUNT PULSE 20-5
RLM DRIVE 12V 22-1
RLM DRIVE (B) 22-2
RLM DRIVE (C) 22-3
REEL MOTOR (+) 19-3
REEL MOTOR (-) 19-4
L:PINCH SOL ON 7-7
PINCH SOL(+) 21-10
SEARCH SOL (+) 21-9
SEARCH SPD 0 7-1
SEARCH SPD 1 7-2
SEARCH SPD 2 7-3
SEARCH SPD 3 8-10
H:S-IDLER SOL ON OUT 21-5
H:T-IDLER SOL ON OUT 19-6
H:S-BRAKE SOL ON OUT 21-4
H:T-BRAKE SOL ON OUT 19-5
NORMAL/SEARCH 8-9
L:REV COMAND OUT 8-8
L:DRUM STOP OUT 8-3
COUNT UP/DOWN 18-5
GND 13-6
REG GND 8-6
THREADING MOTOR(+) OUT 11-2
THREADING MOTOR(-) OUT 11-1
SYS GND 11-3
L:UNTHRE OUT 1-2
CC MOTOR (+) OUT 13-1
CC MOTOR (-) OUT 13-2
L:AUTO OFF 18-1

NOTE;

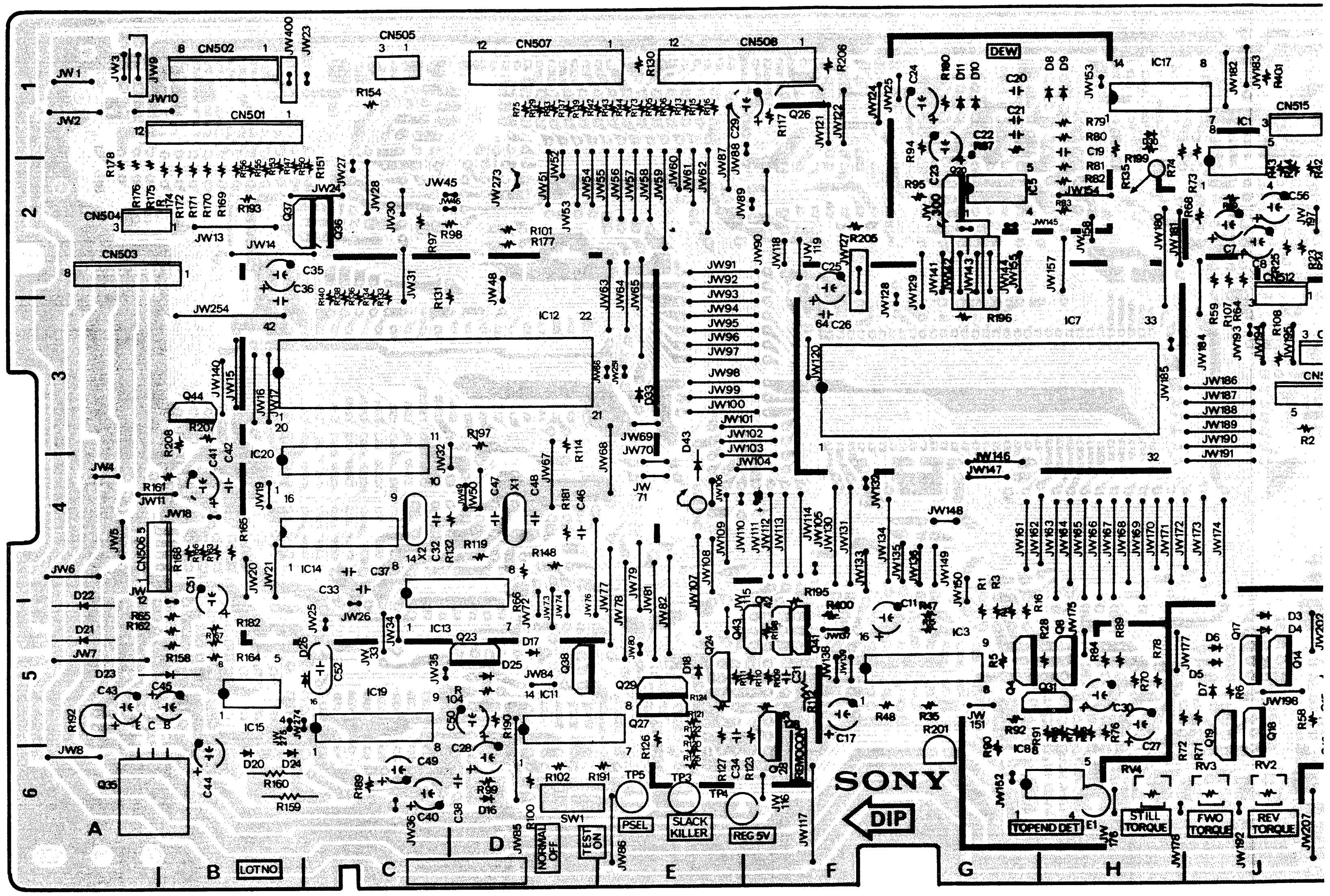
The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

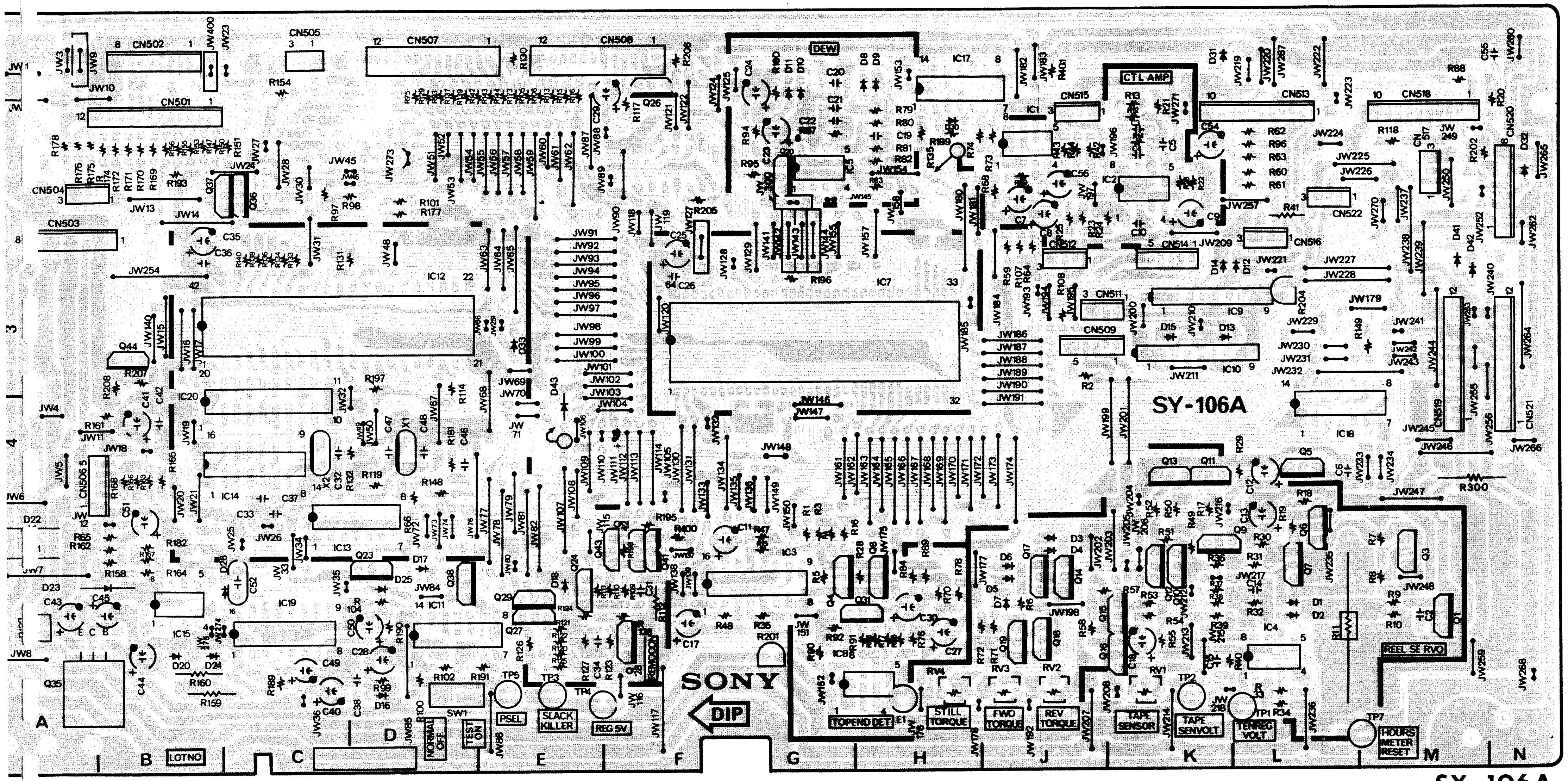
SY-106A (2/2)
1-622-389-22
VP-9000
VP-9000P

SY-106A ; SYSTEM CONTROL
EK ; S/N 10001 thru 10750

SY-106A (1-622-389-22)

CN501	B-1	IC3	G-5	RV4	H-6
CN502	B-1	IC4	L-6		
CN503	A-2	IC5	G-2	SW1	D-6
CN504	A-2	IC7	G-3		
CN505	C-1	IC8	H-6	TP1	L-6
CN506	B-4	IC9	K-3	TP2	K-6
CN507	D-1	IC10	K-3	TP3	E-6
CN508	E-1	IC11	D-5	TP4	F-6
CN509	J-3	IC12	C-3	TP5	E-6
CN511	J-3	IC13	D-4	TP7	M-6
CN512	J-3	IC14	C-4		
CN513	L-1	IC15	B-5	X1	D-4
CN514	K-3	IC17	H-1	X2	C-4
CN515	J-1	IC18	L-4		
CN516	L-2	IC19	C-5		
CN517	M-2	IC20	C-4		
CN518	M-1				
CN519	M-3	Q1	M-5		
CN520	N-2	Q3	M-5		
CN521	N-3	Q4	G-5		
CN522	L-2	Q5	L-4		
		Q6	L-5		
D1	L-5	Q7	L-5		
D2	L-5	Q8	H-5		
D3	J-5	Q9	K-5		
D4	J-5	Q10	K-5		
D5	J-5	Q11	K-4		
D6	J-5	Q12	K-5		
D7	J-5	Q13	K-4		
D8	H-1	Q14	J-5		
D9	H-1	Q15	K-5		
D10	G-1	Q16	K-6		
D11	G-1	Q17	J-5		
D12	L-3	Q18	J-5		
D13	K-3	Q19	J-5		
D14	K-3	Q20	G-2		
D15	K-3	Q23	D-5		
D16	D-6	Q24	E-5		
D17	D-5	Q26	F-1		
D18	E-5	Q27	E-5		
D20	B-6	Q28	F-5		
D21	A-5	Q29	E-5		
D22	A-5	Q31	H-5		
D23	B-5	Q35	A-6		
D24	B-6	Q36	C-2		
D25	D-5	Q37	C-2		
D26	C-5	Q38	D-5		
D31	K-1	Q41	F-5		
D32	N-2	Q42	F-5		
D33	E-3	Q43	F-5		
D43	E-4	Q44	B-3		
E1	H-6	RV1	K-6		
		RV2	J-6		
IC1	J-2	RV3	J-6		
IC2	K-2				


CN501
CN502
CN503
CN504
CN505
CN506
CN507
CN508
CN515
IC7
IC12
IC17
DEW
SONY
DIP
LOTNO
NORMAL OFF
TEST ON
SW1
PSEL
SLACK KILLER
REG 5V
TP3
TP4
TP5
TOPEND DET
STILL TORQUE
FWD TORQUE
REV TORQUE
RV2
RV3
RV4
A
B
C
D
E
F
G
H
J
1
2
3
4
5
6

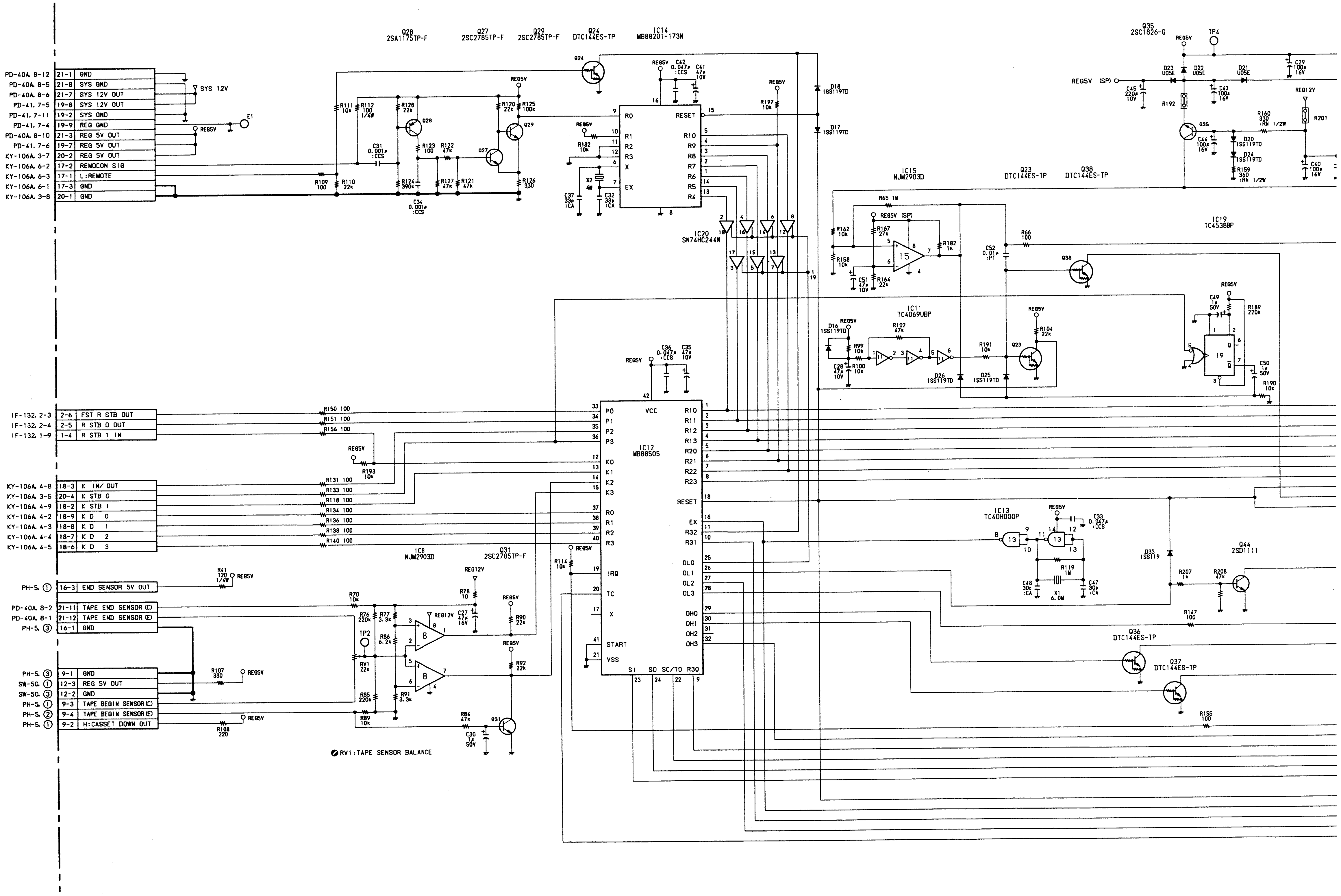

CN502
CN505
CN507
CN508
CN501
CN504
CN503
DEW
IC17
CTL AMP
CN515
CN513
CN518
IC12
IC7
IC20
IC14
IC13
IC19
IC11
IC15
IC3
IC8
IC1
IC2
IC9
IC10
IC18
IC4
CN511
CN509
CN512
CN514
CN516
CN522
CN519
CN520
CN521
CN506
SY-106A
SONY
DIP
TOPEND DET
STILL TORQUE
FWD TORQUE
REV TORQUE
TAPE SENSOR
TAPE SENVOLT
TENREG VOLT
HOURS METER RESET
REEL SERVO
PSEL
SLACK KILLER
REG 5V
NORMAL OFF
TEST ON
LOTNO
SW1
TP1
TP2
TP3
TP4
TP5
TP7
RV1
RV2
RV3
RV4
A
B
C
D
E
F
G
H
J
K
L
M
N

SY-106A

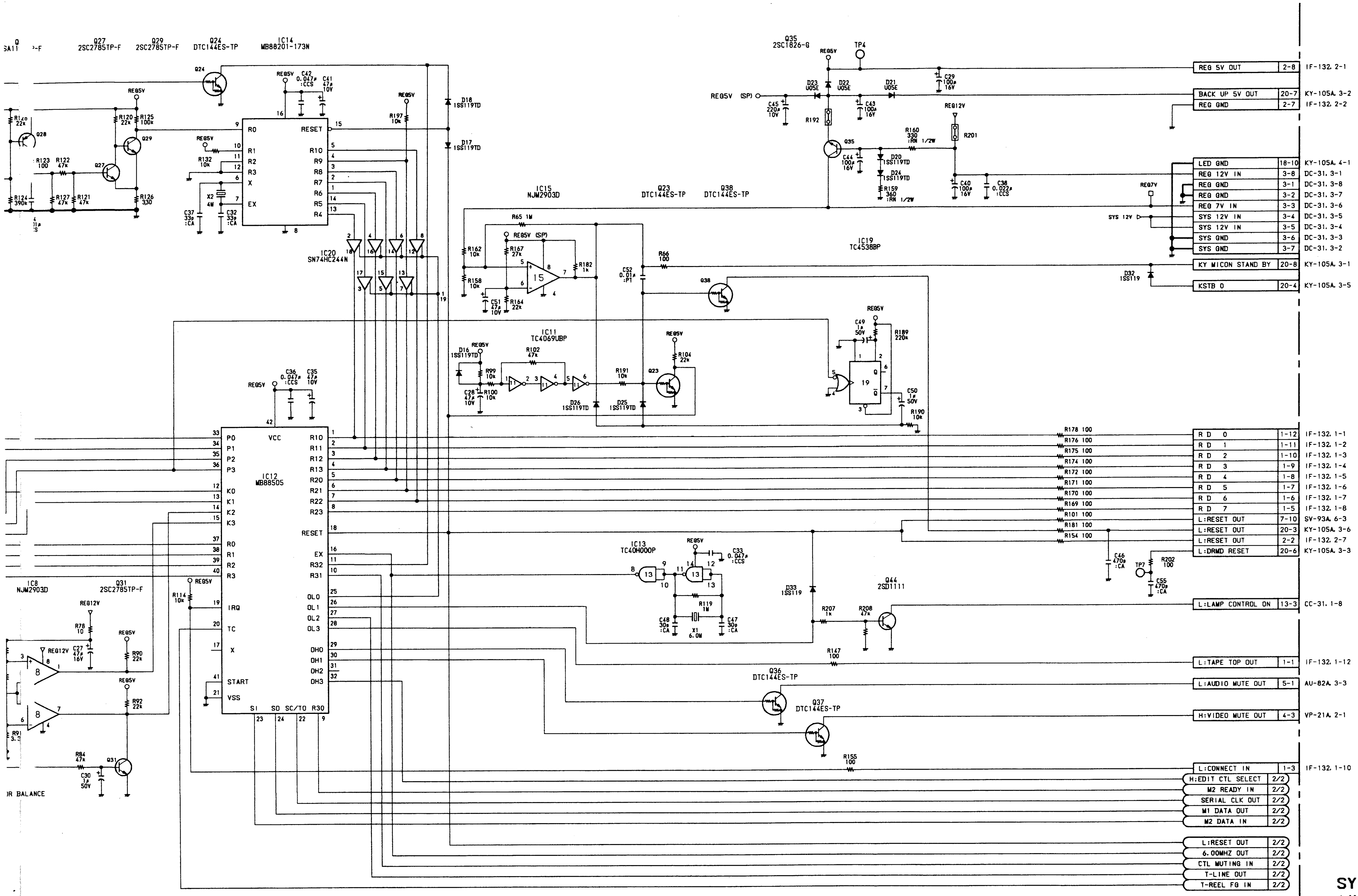
-COMPONENT SIDE-

1-622-389-22
VP-9000
VP-9000P

SY-106A(½); SYSTEM CONTROL
EK; S/N 10751 and higher

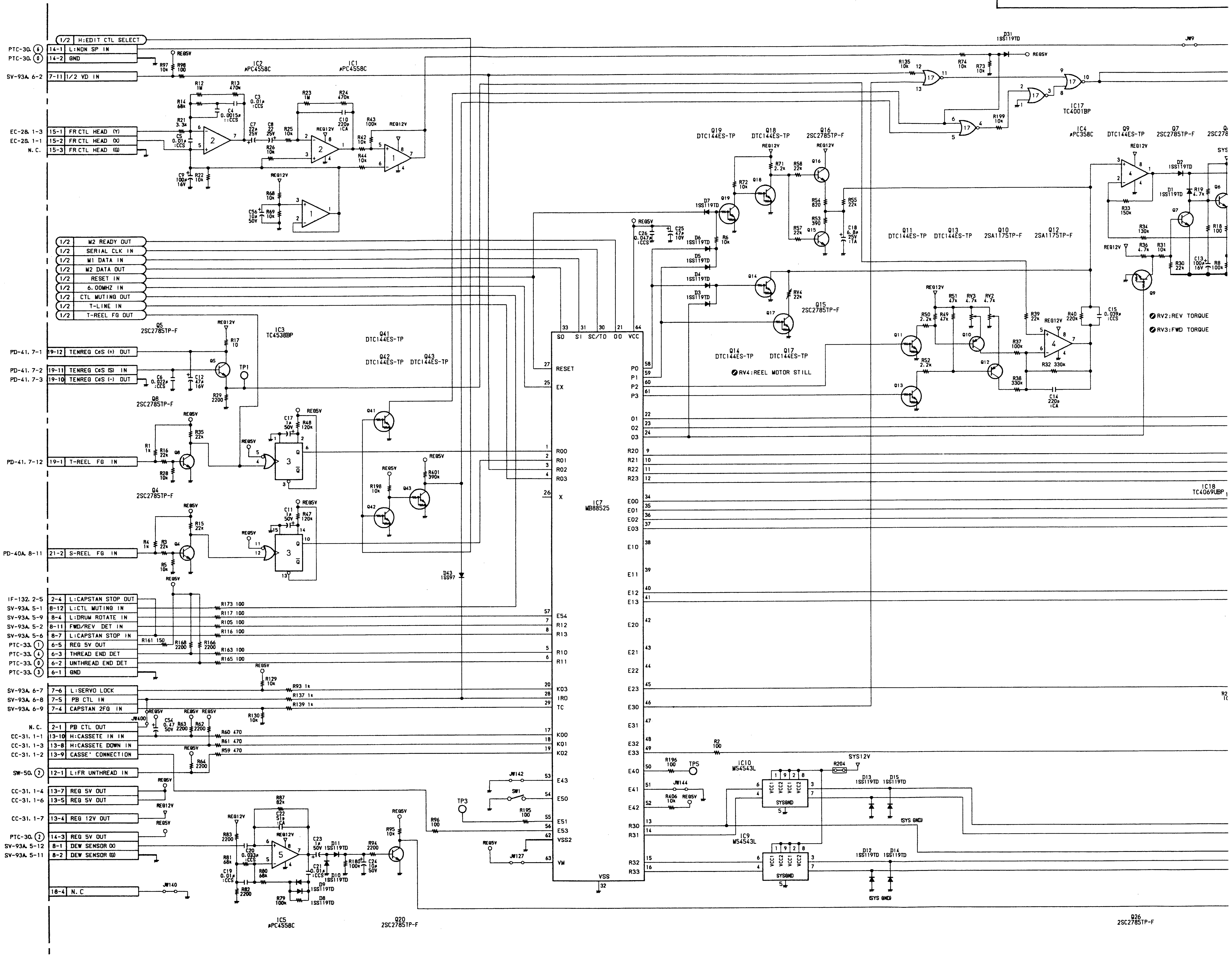


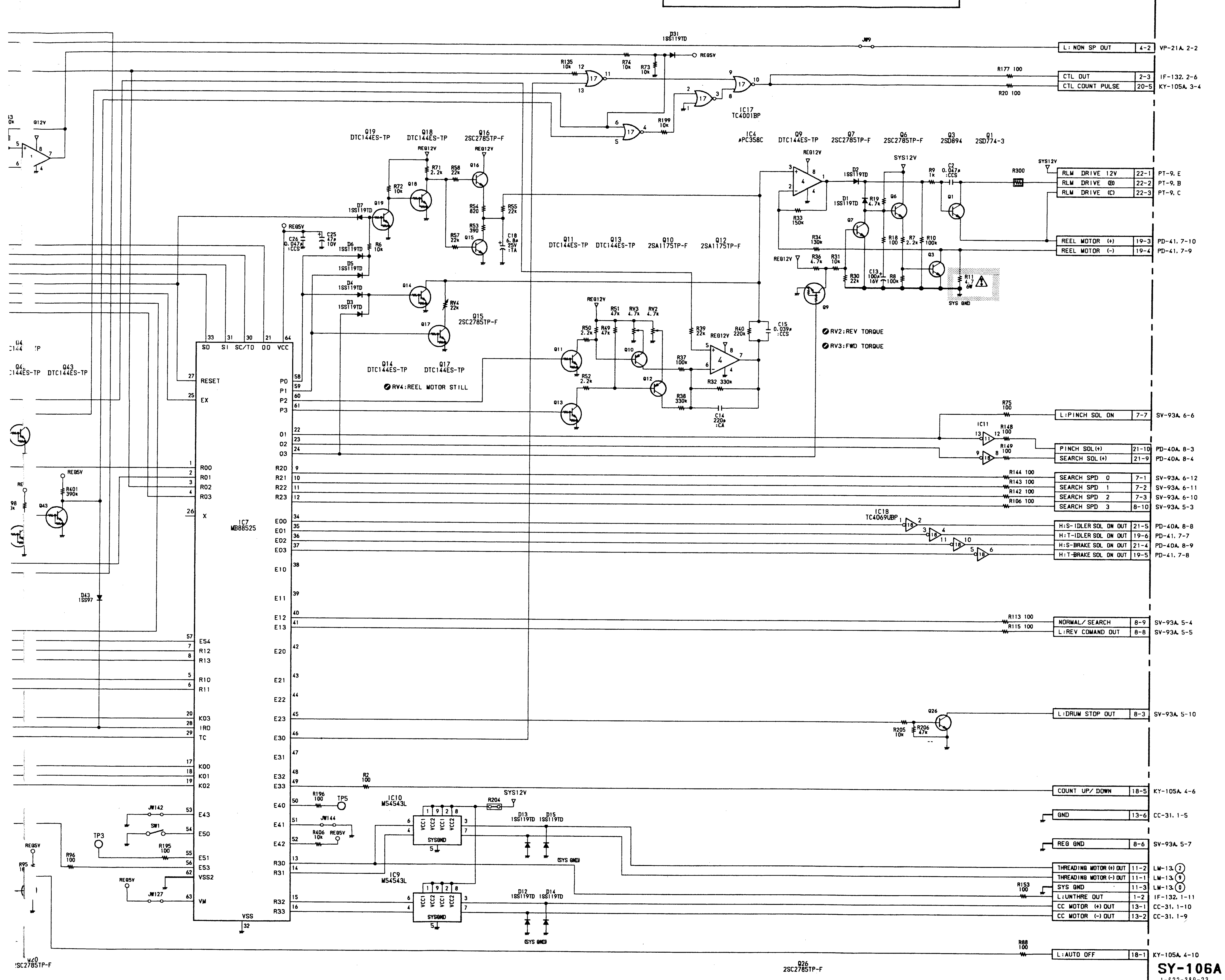
PD-40A 8-12 21-1 GND
PD-40A 8-5 21-8 SYS GND
PD-40A 8-6 21-7 SYS 12V OUT
PD-41 7-5 19-8 SYS 12V OUT
PD-41 7-11 19-2 SYS GND
PD-41 7-4 19-9 REG GND
PD-40A 8-10 21-3 REG 5V OUT
PD-41 7-6 19-7 REG 5V OUT
KY-106A 3-7 20-2 REG 5V OUT
KY-106A 6-2 17-2 REMOCON SIG
KY-106A 6-3 17-1 L:REMOTE
KY-106A 6-1 17-3 GND
KY-106A 3-8 20-1 GND
SYS 12V
IF-132 2-3 2-6 FST R STB OUT
IF-132 2-4 2-5 R STB O OUT
IF-132 1-9 1-4 R STB 1 IN
KY-106A 4-8 18-3 K IN/OUT
KY-106A 3-5 20-4 K STB 0
KY-106A 4-9 18-2 K STB 1
KY-106A 4-2 18-9 K D 0
KY-106A 4-3 18-8 K D 1
KY-106A 4-4 18-7 K D 2
KY-106A 4-5 18-6 K D 3
PH-5 ① 16-3 END SENSOR 5V OUT
PD-40A 8-2 21-11 TAPE END SENSOR (C)
PD-40A 8-1 21-12 TAPE END SENSOR (E)
PH-5 ③ 16-1 GND
PH-5 ③ 9-1 GND
SW-50 ① 12-3 REG 5V OUT
SW-50 ③ 12-2 GND
PH-5 ① 9-3 TAPE BEGIN SENSOR (C)
PH-5 ② 9-4 TAPE BEGIN SENSOR (E)
PH-5 ① 9-2 H:CASSET DOWN OUT
Q28 2SA1175TP-F
Q27 2SC2785TP-F
Q29 2SC2785TP-F
Q24 DTC144ES-TP
IC14 MB88201-173N
IC20 SN74HC244N
IC12 MB88505
IC8 NJM2903D
Q31 2SC2785TP-F
IC15 NJM2903D
IC11 TC4069UBP
IC13 TC40H000P
Q23 DTC144ES-TP
Q38 DTC144ES-TP
IC19 TC4538BP
Q35 2SC1826-G
TP4
Q44 2SD1111
Q36 DTC144ES-TP
Q37 DTC144ES-TP
D33 1SS119
D18 1SS119TD
D17 1SS119TD
D16 1SS119TD
D26 1SS119TD
D25 1SS119TD
D23 U05E
D22 U05E
D21 U05E
D20 1SS119TD
D24 1SS119TD
X1 6.0M
X2 4M
TP2
RV1 22k
RV1: TAPE SENSOR BALANCE
REG5V
REG12V
REG5V (SP)


Q27 2SC2785TP-F
Q29 2SC2785TP-F
Q24 DTC144ES-TP
IC14 MB88201-173N
IC20 SN74HC244N
D18 1SS119TD
D17 1SS119TD
IC15 NJM2903D
Q23 DTC144ES-TP
Q38 DTC144ES-TP
Q35 2SC1826-G
TP4
REG5V (SP)
IC19 TC4538BP
IC11 TC4069UBP
IC12 MB8850S
IC13 TC40H000P
X1 6.0M
IC8 NJM2903D
Q31 2SC2785TP-F
Q44 2SD1111
Q36 DTC144ES-TP
Q37 DTC144ES-TP
D33 1SS119
D32 1SS119
SYS 12V
REG5V
REG12V
REG7V
TP7
R BALANCE
REG 5V OUT | 2-8 | IF-132, 2-1
BACK UP 5V OUT | 20-7 | KY-105A, 3-2
REG GND | 2-7 | IF-132, 2-2
LED GND | 18-10 | KY-105A, 4-1
REG 12V IN | 3-8 | DC-31, 3-1
REG GND | 3-1 | DC-31, 3-8
REG GND | 3-2 | DC-31, 3-7
REG 7V IN | 3-3 | DC-31, 3-6
SYS 12V IN | 3-4 | DC-31, 3-5
SYS 12V IN | 3-5 | DC-31, 3-4
SYS GND | 3-6 | DC-31, 3-3
SYS GND | 3-7 | DC-31, 3-2
KY MICON STAND BY | 20-8 | KY-105A, 3-1
KSTB 0 | 20-4 | KY-105A, 3-5
R D 0 | 1-12 | IF-132, 1-1
R D 1 | 1-11 | IF-132, 1-2
R D 2 | 1-10 | IF-132, 1-3
R D 3 | 1-9 | IF-132, 1-4
R D 4 | 1-8 | IF-132, 1-5
R D 5 | 1-7 | IF-132, 1-6
R D 6 | 1-6 | IF-132, 1-7
R D 7 | 1-5 | IF-132, 1-8
L:RESET OUT | 7-10 | SV-93A, 6-3
L:RESET OUT | 20-3 | KY-105A, 3-6
L:RESET OUT | 2-2 | IF-132, 2-7
L:DRMD RESET | 20-6 | KY-105A, 3-3
L:LAMP CONTROL ON | 13-3 | CC-31, 1-8
L:TAPE TOP OUT | 1-1 | IF-132, 1-12
L:AUDIO MUTE OUT | 5-1 | AU-82A, 3-3
H:VIDEO MUTE OUT | 4-3 | VP-21A, 2-1
L:CONNECT IN | 1-3 | IF-132, 1-10
H:EDIT CTL SELECT | 2/2
M2 READY IN | 2/2
SERIAL CLK OUT | 2/2
M1 DATA OUT | 2/2
M2 DATA IN | 2/2
L:RESET OUT | 2/2
6.00MHZ OUT | 2/2
CTL MUTING IN | 2/2
T-LINE OUT | 2/2
T-REEL FG IN | 2/2

SY-106A (1/2)
1-622-389-23
VP-9000
VP-9000P

SY-106A(2/2) ; SYSTEM CONTROL
EK ; S/N 10751 and higher


1/2 H:EDIT CTL SELECT
PTC-30 ⑥ 14-1 L:NON SP IN
PTC-30 ⑧ 14-2 GND
SV-93A 6-2 7-11 1/2 VD IN
EC-28 1-3 15-1 FR CTL HEAD (Y)
EC-28 1-1 15-2 FR CTL HEAD (X)
N.C. 15-3 FR CTL HEAD (G)
1/2 M2 READY OUT
1/2 SERIAL CLK IN
1/2 M1 DATA IN
1/2 M2 DATA OUT
1/2 RESET IN
1/2 6.00MHz IN
1/2 CTL MUTING OUT
1/2 T-LINE IN
1/2 T-REEL FG OUT
PD-41 7-1 19-12 TENREG C+S (+) OUT
PD-41 7-2 19-11 TENREG C+S (S) IN
PD-41 7-3 19-10 TENREG C+S (-) OUT
PD-41 7-12 19-1 T-REEL FG IN
PD-40A 8-11 21-2 S-REEL FG IN
IF-132 2-5 2-4 L:CAPSTAN STOP OUT
SV-93A 5-1 8-12 L:CTL MUTING IN
SV-93A 5-9 8-4 L:DRUM ROTATE IN
SV-93A 5-2 8-11 FWD/REV DET IN
SV-93A 5-6 8-7 L:CAPSTAN STOP IN
PTC-33 ① 6-5 REG 5V OUT
PTC-33 ④ 6-3 THREAD END DET
PTC-33 ⑧ 6-2 UNTHREAD END DET
PTC-33 ③ 6-1 GND
SV-93A 6-7 7-6 L:SERVO LOCK
SV-93A 6-8 7-5 PB CTL IN
SV-93A 6-9 7-4 CAPSTAN 2FG IN
N.C. 2-1 PB CTL OUT
CC-31 1-1 13-10 H:CASSETE IN IN
CC-31 1-3 13-8 H:CASSETE DOWN IN
CC-31 1-2 13-9 CASSE' CONNECTION
SW-50 ② 12-1 L:FR UNTHREAD IN
CC-31 1-4 13-7 REG 5V OUT
CC-31 1-6 13-5 REG 5V OUT
CC-31 1-7 13-4 REG 12V OUT
PTC-30 ② 14-3 REG 5V OUT
SV-93A 5-12 8-1 DEW SENSOR (X)
SV-93A 5-11 8-2 DEW SENSOR (G)
18-4 N.C
IC1 μPC4558C
IC2 μPC4558C
IC3 TC4538BP
IC5 μPC4558C
IC7 MB88525
IC4 μPC358C
IC9 M54543L
IC10 M54543L
IC17 TC4001BP
IC18 TC4069UBP
Q5 2SC2785TP-F
Q8 2SC2785TP-F
Q4 2SC2785TP-F
Q41 DTC144ES-TP
Q42 DTC144ES-TP
Q43 DTC144ES-TP
Q19 DTC144ES-TP
Q18 DTC144ES-TP
Q16 2SC2785TP-F
Q15 2SC2785TP-F
Q14 DTC144ES-TP
Q17 DTC144ES-TP
Q11 DTC144ES-TP
Q13 DTC144ES-TP
Q10 2SA1175TP-F
Q12 2SA1175TP-F
Q9 DTC144ES-TP
Q7 2SC2785TP-F
Q20 2SC2785TP-F
Q26 2SC2785TP-F
D31 1SS119TD
D43 1SS97
RV4:REEL MOTOR STILL
RV2:REV TORQUE
RV3:FWD TORQUE
SYS12V
SYS GND
REG5V
REG12V
TP1
TP3
TP5
SO SI SC/TO OO VCC
RESET
EX
X
P0 P1 P2 P3
O1 O2 O3
R00 R01 R02 R03
R20 R21 R22 R23
E00 E01 E02 E03
E10 E11 E12 E13
E20 E21 E22 E23
E30 E31 E32 E33
E40 E41 E42
R30 R31 R32 R33
E54 R12 R13 R10 R11
K03 IRQ TC
K00 K01 K02
E43 E50 E51 E53
VSS2 VM VSS


L: NON SP OUT 4-2 VP-21A 2-2
CTL OUT 2-3 IF-132, 2-6
CTL COUNT PULSE 20-5 KY-105A 3-4
IC17 TC4001BP
IC4 μPC358C
RLM DRIVE 12V 22-1 PT-9, E
RLM DRIVE (B) 22-2 PT-9, B
RLM DRIVE (C) 22-3 PT-9, C
REEL MOTOR (+) 19-3 PD-41, 7-10
REEL MOTOR (-) 19-4 PD-41, 7-9
RV2: REV TORQUE
RV3: FWD TORQUE
RV4: REEL MOTOR STILL
IC7 MB88525
L: PINCH SOL ON 7-7 SV-93A 6-6
PINCH SOL(+) 21-10 PD-40A 8-3
SEARCH SOL(+) 21-9 PD-40A 8-4
SEARCH SPD 0 7-1 SV-93A 6-12
SEARCH SPD 1 7-2 SV-93A 6-11
SEARCH SPD 2 7-3 SV-93A 6-10
SEARCH SPD 3 8-10 SV-93A 5-3
IC18 TC4069UBP
H: S-IDLER SOL ON OUT 21-5 PD-40A 8-8
H: T-IDLER SOL ON OUT 19-6 PD-41, 7-7
H: S-BRAKE SOL ON OUT 21-4 PD-40A 8-9
H: T-BRAKE SOL ON OUT 19-5 PD-41, 7-8
NORMAL/ SEARCH 8-9 SV-93A 5-4
L: REV COMAND OUT 8-8 SV-93A 5-5
L: DRUM STOP OUT 8-3 SV-93A 5-10
COUNT UP/ DOWN 18-5 KY-105A 4-6
GND 13-6 CC-31, 1-5
REG GND 8-6 SV-93A 5-7
THREADING MOTOR (+) OUT 11-2 LM-13, ⑦
THREADING MOTOR (-) OUT 11-1 LM-13, ⑨
SYS GND 11-3 LM-13, ⑩
L: UNTHRE OUT 1-2 IF-132, 1-11
CC MOTOR (+) OUT 13-1 CC-31, 1-10
CC MOTOR (-) OUT 13-2 CC-31, 1-9
IC10 M54543L
IC9 M54543L
L: AUTO OFF 18-1 KY-105A 4-10

SY-106A (2/2)
1-622-389-23
VP-9000
VP-9000P

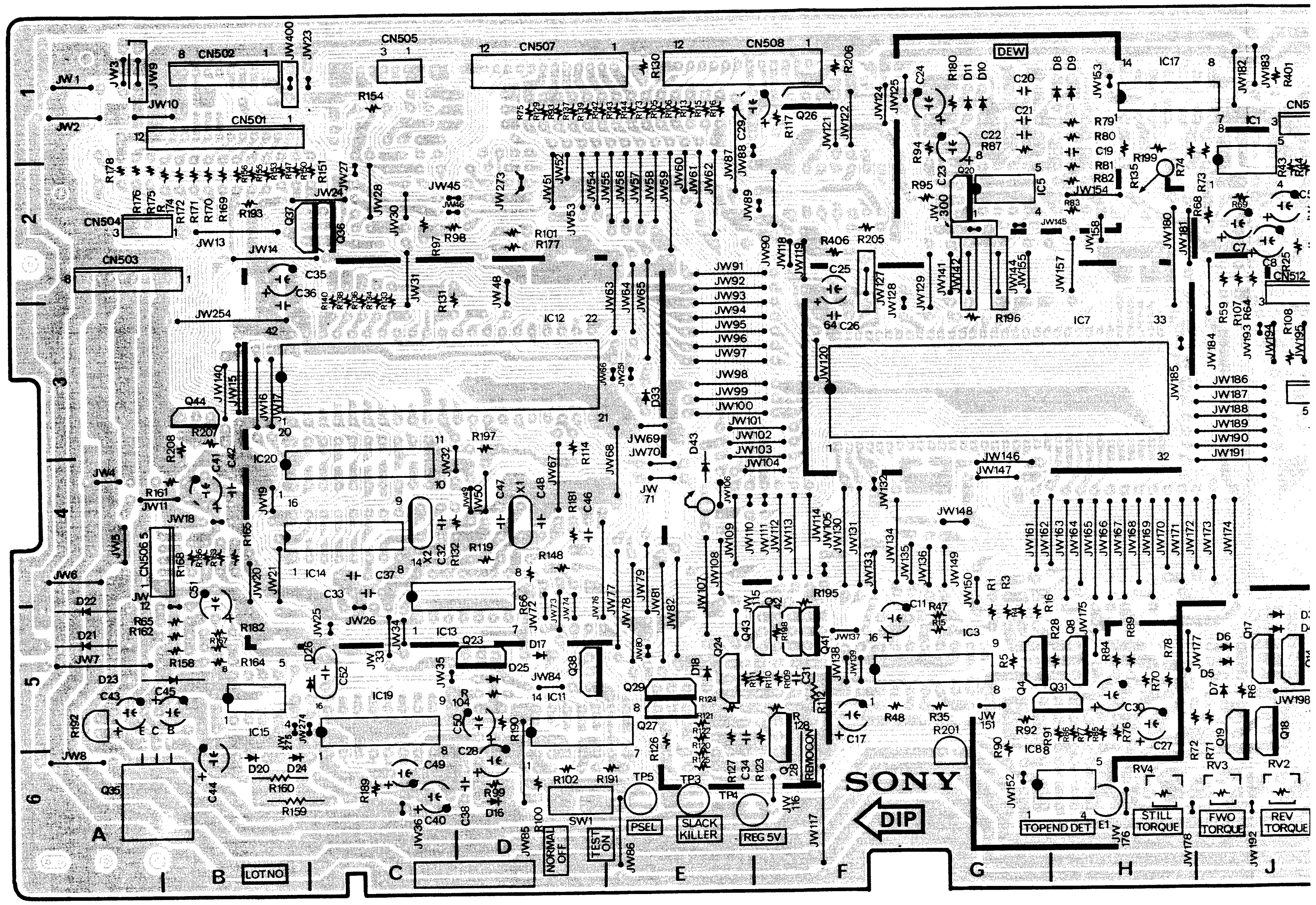
NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

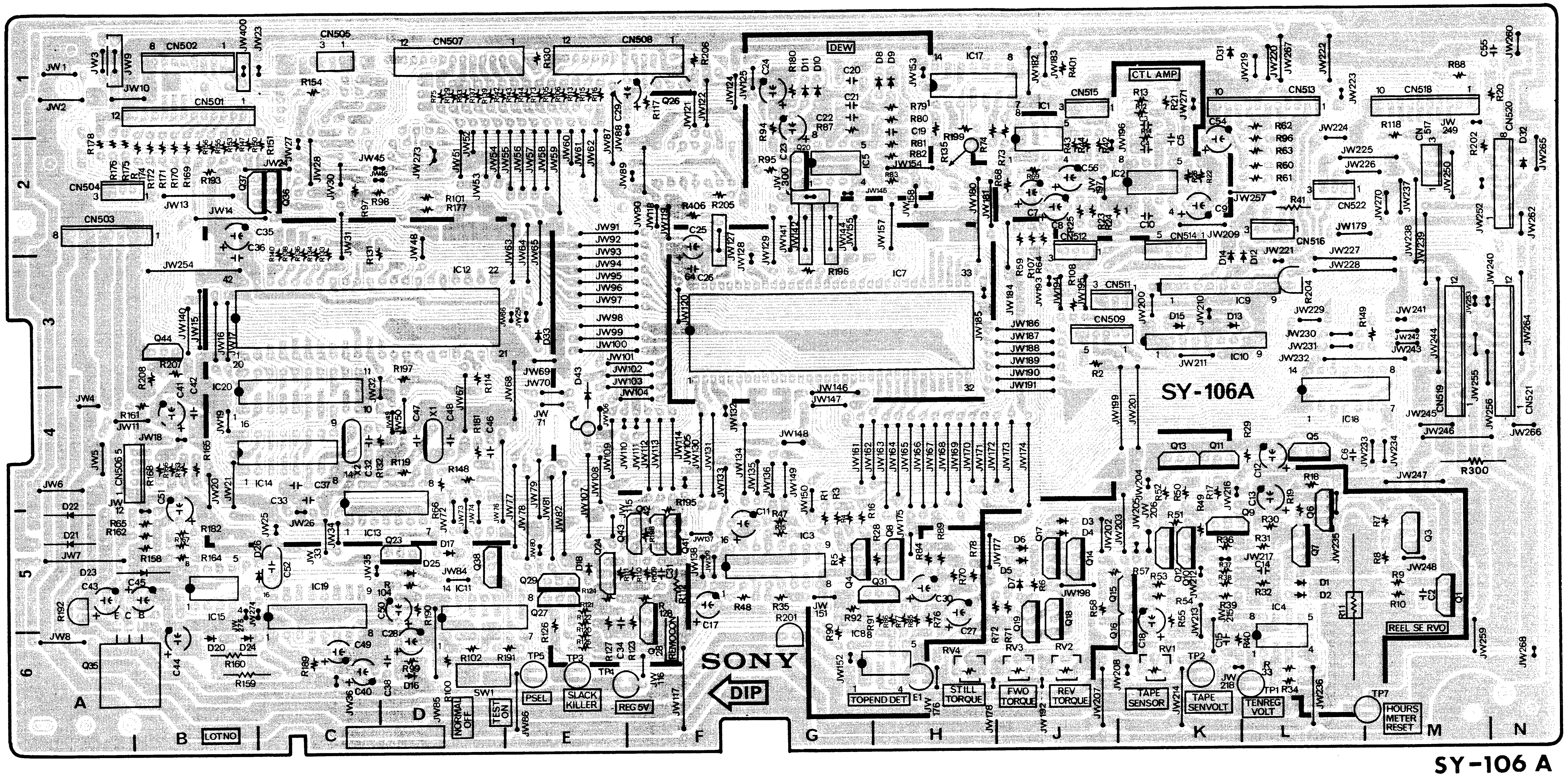
SY-106A ; SYSTEM CONTROL
EN ; S/N 10751 and higher

SY-106A (1-622-389-23)

CN501	B-1	D43	E-4	Q44	B-3
CN502	B-1				
CN503	A-2	E1	H-6	RV1	K-6
CN504	A-2			RV2	J-6
CN505	C-1	IC1	J-2	RV3	J-6
CN506	B-4	IC2	K-2	RV4	H-6
CN507	D-1	IC3	G-5		
CN508	E-1	IC4	L-6	SW1	D-6
CN509	J-3	IC5	G-2		
CN511	J-3	IC7	G-3	TP1	L-6
CN512	J-3	IC8	H-6	TP2	K-6
CN513	L-1	IC9	K-3	TP3	E-6
CN514	K-3	IC10	K-3	TP4	E-6
CN515	J-1	IC11	D-5	TP5	E-6
CN516	L-2	IC12	D-3	TP7	M-6
CN517	M-2	IC13	D-4		
CN518	M-1	IC14	C-4	X1	D-4
CN519	M-3	IC15	B-5	X2	C-4
CN520	N-2	IC17	H-1		
CN521	N-3	IC18	L-4		
CN522	L-2	IC19	C-5		
		IC20	C-4		
D1	L-5				
D2	L-5	Q1	M-5		
D3	J-5	Q3	M-5		
D4	J-5	Q4	G-5		
D5	J-5	Q5	L-4		
D6	J-5	Q6	L-5		
D7	J-5	Q7	L-5		
D8	H-1	Q8	H-5		
D9	H-1	Q9	K-5		
D10	G-1	Q10	K-5		
D11	G-1	Q11	K-4		
D12	L-3	Q12	K-5		
D13	K-3	Q13	K-4		
D14	K-3	Q14	J-5		
D15	K-3	Q15	K-5		
D16	D-6	Q16	K-6		
D17	D-5	Q17	J-5		
D18	E-5	Q18	J-5		
D20	B-6	Q19	J-5		
D21	A-5	Q20	G-2		
D22	A-5	Q23	D-5		
D23	B-5	Q24	E-5		
D24	B-6	Q26	F-1		
D25	D-5	Q27	E-5		
D26	C-5	Q28	F-5		
D30	H-1	Q29	E-5		
D31	K-1	Q31	H-5		
D32	N-2	Q35	A-6		
D33	E-3	Q36	C-2		
D41	M-3	Q37	C-2		
D42	M-3	Q38	D-5		
		Q41	F-5		
		Q42	F-5		
		Q43	F-5		



CN501
CN502
CN503
CN504
CN505
CN506
CN507
CN508
IC7
IC12
IC17
DEW
SONY
DIP
LOT NO
NORMAL OFF
TEST ON
PSEL
SLACK KILLER
REG 5V
TOPEND DET
STILL TORQUE
FWD TORQUE
REV TORQUE
A
B
C
D
E
F
G
H
J
1
2
3
4
5
6

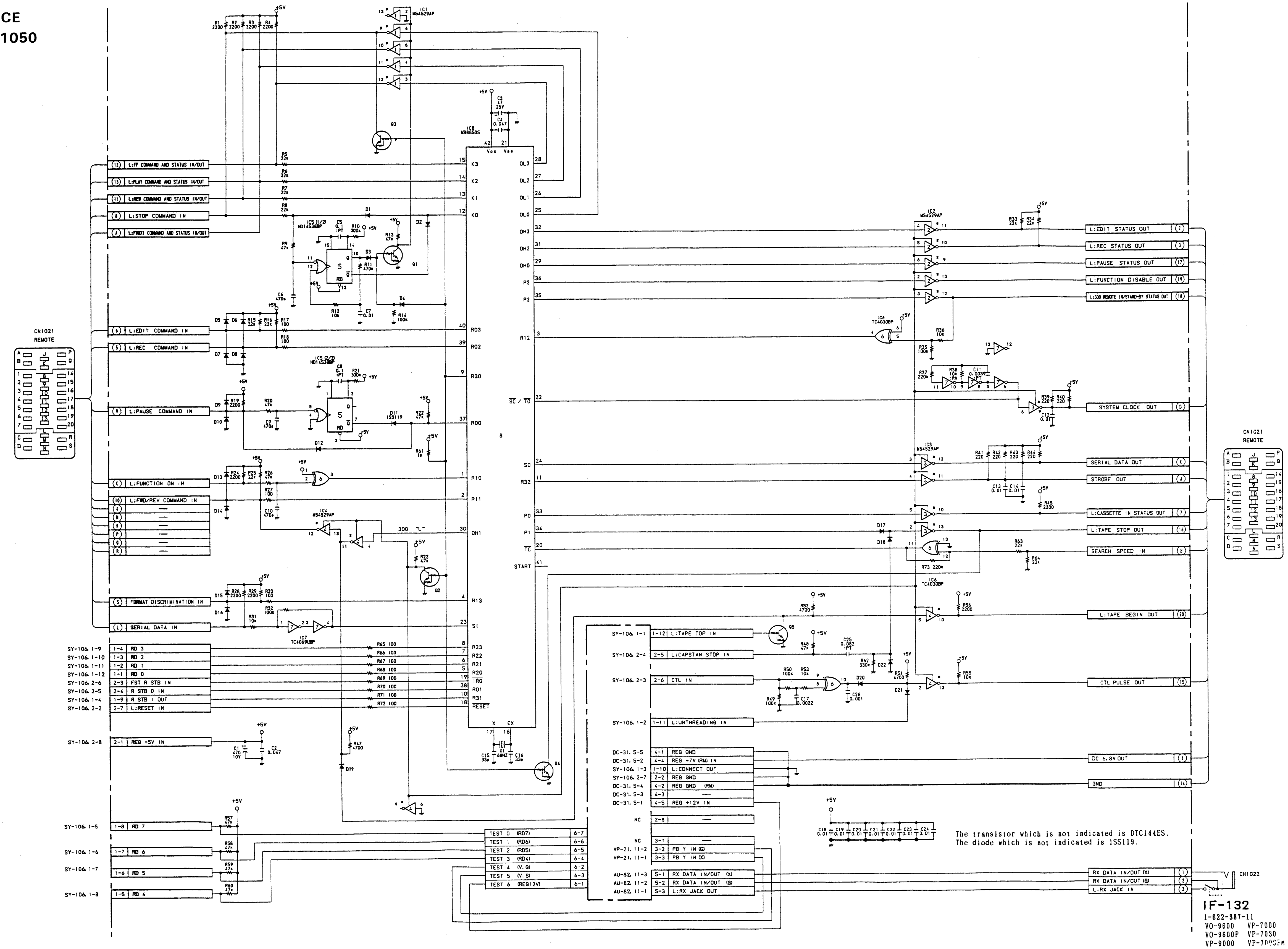

SY-106A
SONY
DIP
DEW
CTL AMP
TOPEND DET
STILL TORQUE
FWD TORQUE
REV TORQUE
TAPE SENSOR
TAPE SENVOLT
TENREG VOLT
HOURS METER RESET
REEL SE RVO
PSEL
SLACK KILLER
REG 5V
REMOCON
TEST ON
NORMAL OFF
LOTNO
SW1
TP1
TP2
TP3
TP4
TP5
TP7
RV1
RV2
RV3
RV4
IC1
IC2
IC3
IC4
IC7
IC8
IC9
IC10
IC11
IC12
IC13
IC14
IC15
IC17
IC18
IC19
IC20
CN501
CN502
CN503
CN504
CN505
CN506
CN507
CN508
CN509
CN511
CN512
CN513
CN514
CN515
CN516
CN517
CN518
CN519
CN520
CN521
CN522
A
B
C
D
E
F
G
H
J
K
L
M
N
1
2
3
4
5
6

SY-106 A

-COMPONENT SIDE-

1-622-389-23
VP-9000
VP-9000P

IF-132:33P INTERFACE
EK;S/N10001 thru 11050


CN1021
REMOTE
(12) L:FF COMMAND AND STATUS IN/OUT
(13) L:PLAY COMMAND AND STATUS IN/OUT
(11) L:REW COMMAND AND STATUS IN/OUT
(8) L:STOP COMMAND IN
(A) L:FWDX1 COMMAND AND STATUS IN/OUT
(6) L:EDIT COMMAND IN
(5) L:REC COMMAND IN
(9) L:PAUSE COMMAND IN
(C) L:FUNCTION ON IN
(10) L:FWD/REV COMMAND IN
(4)
(M)
(N)
(P)
(Q)
(R)
(S) FORMAT DISCRIMINATION IN
(L) SERIAL DATA IN
SY-106 1-9 1-4 RD 3
SY-106 1-10 1-3 RD 2
SY-106 1-11 1-2 RD 1
SY-106 1-12 1-1 RD 0
SY-106 2-6 2-3 FST R STB IN
SY-106 2-5 2-4 R STB 0 IN
SY-106 1-4 1-9 R STB 1 OUT
SY-106 2-2 2-7 L:RESET IN
SY-106 2-8 2-1 REG +5V IN
SY-106 1-5 1-8 RD 7
SY-106 1-6 1-7 RD 6
SY-106 1-7 1-6 RD 5
SY-106 1-8 1-5 RD 4
IC1 M54529AP
IC2 M54529AP
IC3 M54529AP
IC4 M54529AP
IC5 (1/2) MD14538BP
IC5 (2/2) MD14538BP
IC6 TC4030BP
IC7 TC4069UBP
IC8 MB8850S
Q1
Q2
Q3
Q4
Q5
+5V
R1 2200
R2 2200
R3 2200
R4 2200
R5 22k
R6 22k
R7 22k
R8 22k
C3 47 25V
C4 0.047
Vcc Vss
K3 K2 K1 K0
OL3 OL2 OL1 OL0
OH3 OH2 OH0 P3 P2
R12
R03 R02 R30 R00
SC / TO
R10 R11 OH1
SO R32 P0 P1 TC START
R13 SI
R23 R22 R21 R20 IRQ R01 R31 RESET
X EX
X1 6MHZ
C15 33p
C16 33p
300 "L"
D11 1SS119
R65 100
R66 100
R67 100
R68 100
R69 100
R70 100
R71 100
R72 100
TEST 0 (RD7) 6-7
TEST 1 (RD6) 6-6
TEST 2 (RD5) 6-5
TEST 3 (RD4) 6-4
TEST 4 (V.G) 6-2
TEST 5 (V.S) 6-3
TEST 6 (REG12V) 6-1
SY-106 1-1 1-12 L:TAPE TOP IN
SY-106 2-4 2-5 L:CAPSTAN STOP IN
SY-106 2-3 2-6 CTL IN
SY-106 1-2 1-11 L:UNTHREADING IN
DC-31 5-5 4-1 REG GND
DC-31 5-2 4-4 REG +7V (RM) IN
SY-106 1-3 1-10 L:CONNECT OUT
SY-106 2-7 2-2 REG GND
DC-31 5-4 4-2 REG GND (RM)
DC-31 5-3 4-3 —
DC-31 5-1 4-5 REG +12V IN
NC 2-8 —
NC 3-1 —
VP-21 11-2 3-2 PB Y IN (G)
VP-21 11-1 3-3 PB Y IN (X)
AU-82 11-3 5-1 RX DATA IN/OUT (X)
AU-82 11-2 5-2 RX DATA IN/OUT (G)
AU-82 11-1 5-3 L:RX JACK OUT
L:EDIT STATUS OUT (2)
L:REC STATUS OUT (3)
L:PAUSE STATUS OUT (17)
L:FUNCTION DISABLE OUT (19)
L:300 REMOTE IN/STAND-BY STATUS OUT (18)
SYSTEM CLOCK OUT (D)
SERIAL DATA OUT (K)
STROBE OUT (J)
L:CASSETTE IN STATUS OUT (7)
L:TAPE STOP OUT (16)
SEARCH SPEED IN (B)
L:TAPE BEGIN OUT (20)
CTL PULSE OUT (15)
DC 6.8V OUT (1)
GND (14)
RX DATA IN/OUT (X) (1)
RX DATA IN/OUT (G) (2)
L:RX JACK IN (3)
CN1022
C18 0.01
C19 0.01
C20 0.01
C21 0.01
C22 0.01
C23 0.01
C24 0.01

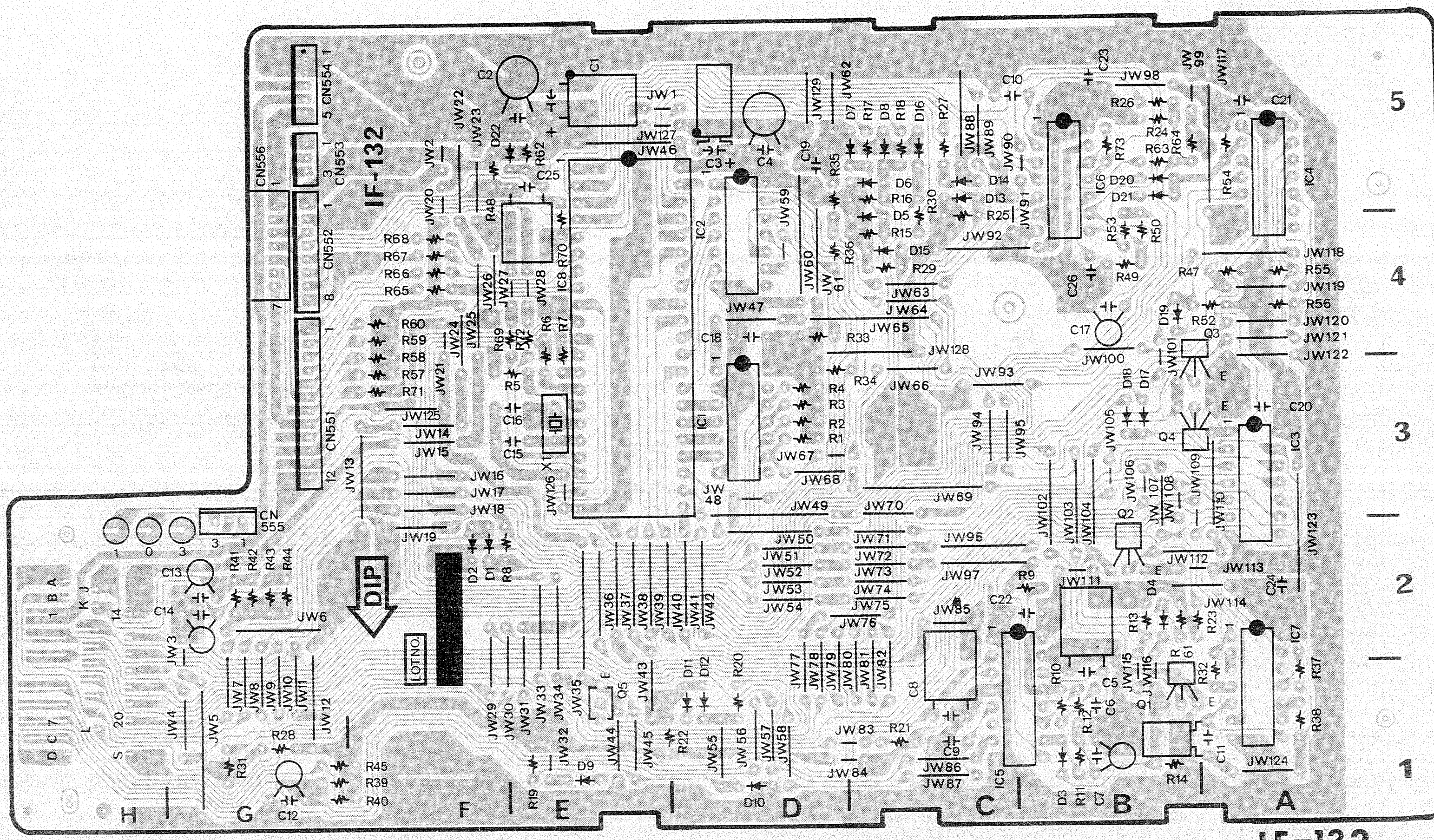
The transistor which is not indicated is DTC144ES.
The diode which is not indicated is 1SS119.

IF-132
1-622-387-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000FM
VP-9000P

IF-132: 33P INTERFACE
EK; S/N 10001 thru 11050

IF-132 (1-622-387-11)

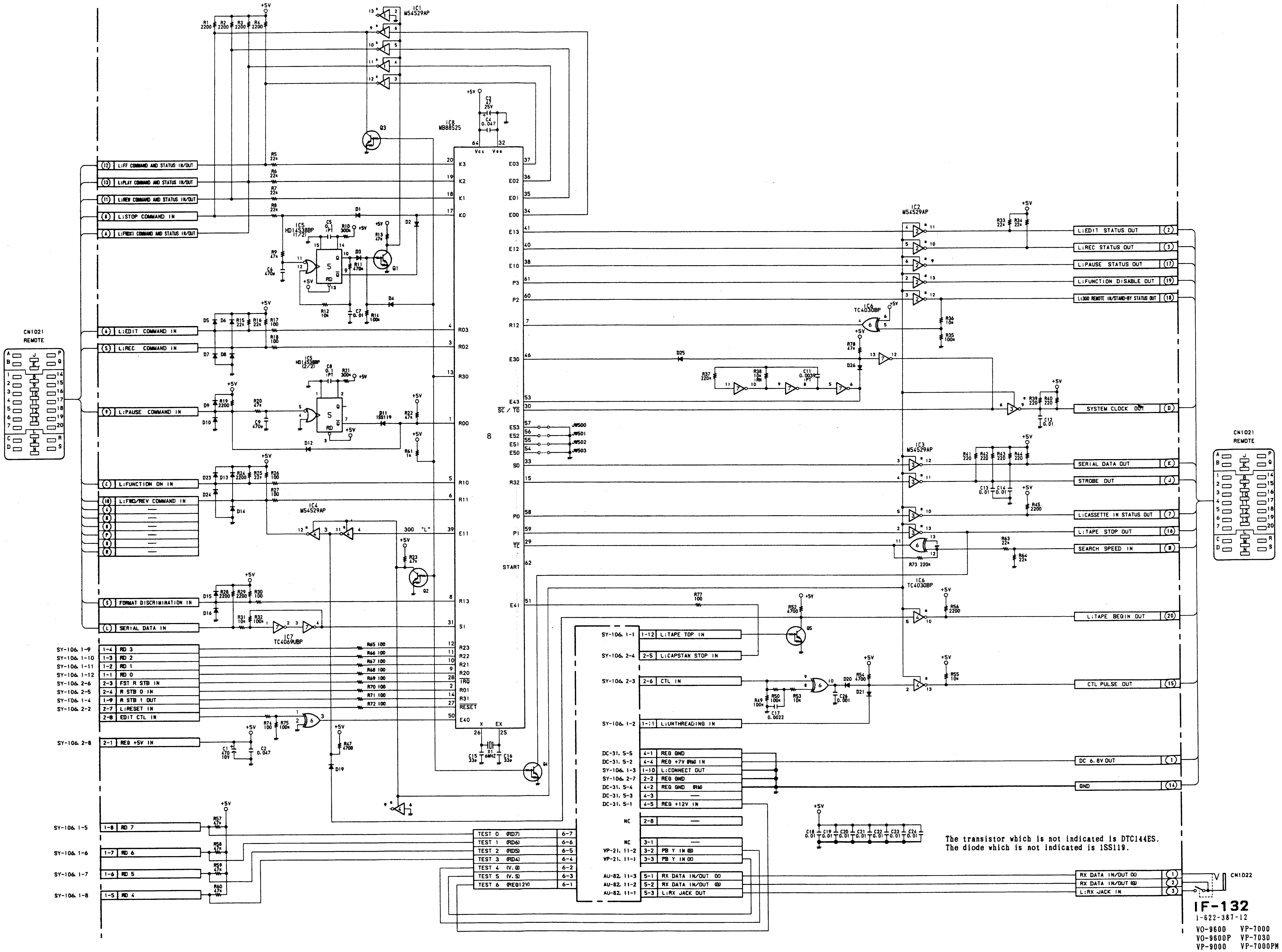
CN551	G-3
CN552	G-4
CN553	G-5
CN554	G-5
CN555	G-3
CN556	G-4
D1	F-2
D2	F-2
D3	B-1
D4	B-2
D5	C-5
D6	C-5
D7	C-5
D8	C-5
D9	E-1
D10	D-1
D11	D-1
D12	D-1
D13	C-5
D14	C-5
D15	C-4
D16	C-5
D17	B-3
D18	B-3
D19	B-4
D20	B-5
D21	B-5
D22	E-5
IC1	D-3
IC2	D-4
IC3	A-3
IC4	A-5
IC5	C-2
IC6	B-5
IC7	A-1
IC8	E-4
Q1	B-1
Q2	B-2
Q3	B-4
Q4	B-3
Q5	E-1
X1	E-3


IF-132
DIP
LOTNO
CN551
CN552
CN553
CN554
CN555
CN556
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC8
X1
H
G
F
E
D
C
B
A
5
4
3
2
1

IF-132
-COMPONENT SIDE-

1-622-387-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

IF-132 ; 33P INTERFACE
EK ; S/N 11051 and higher


IC1 M54529AP
IC2 M54529AP
IC3 M54529AP
IC4 M54529AP
IC5 HD14538BP (1/2)
IC5 HD14538BP (2/2)
IC6 TC4030BP
IC7 TC4069UBP
IC8 MB88525
Q1
Q2
Q3
Q4
Q5
X1 6MHZ
CN1021 REMOTE
CN1022
(12) L:FF COMMAND AND STATUS IN/OUT
(13) L:PLAY COMMAND AND STATUS IN/OUT
(11) L:REW COMMAND AND STATUS IN/OUT
(8) L:STOP COMMAND IN
(A) L:FIDX1 COMMAND AND STATUS IN/OUT
(6) L:EDIT COMMAND IN
(5) L:REC COMMAND IN
(9) L:PAUSE COMMAND IN
(C) L:FUNCTION ON IN
(10) L:FWD/REV COMMAND IN
(S) FORMAT DISCRIMINATION IN
(L) SERIAL DATA IN
SY-106, 1-9 1-4 RD 3
SY-106, 1-10 1-3 RD 2
SY-106, 1-11 1-2 RD 1
SY-106, 1-12 1-1 RD 0
SY-106, 2-6 2-3 FST R STB IN
SY-106, 2-5 2-4 R STB 0 IN
SY-106, 1-4 1-9 R STB 1 OUT
SY-106, 2-2 2-7 L:RESET IN
2-8 EDIT CTL IN
SY-106, 2-8 2-1 REG +5V IN
SY-106, 1-5 1-8 RD 7
SY-106, 1-6 1-7 RD 6
SY-106, 1-7 1-6 RD 5
SY-106, 1-8 1-5 RD 4
TEST 0 (RD7) 6-7
TEST 1 (RD6) 6-6
TEST 2 (RD5) 6-5
TEST 3 (RD4) 6-4
TEST 4 (V. G) 6-2
TEST 5 (V. S) 6-3
TEST 6 (REG12V) 6-1
SY-106, 1-1 1-12 L:TAPE TOP IN
SY-106, 2-4 2-5 L:CAPSTAN STOP IN
SY-106, 2-3 2-6 CTL IN
SY-106, 1-2 1-11 L:UNTHREADING IN
DC-31, 5-5 4-1 REG GND
DC-31, 5-2 4-4 REG +7V (RM) IN
SY-106, 1-3 1-10 L:CONNECT OUT
SY-106, 2-7 2-2 REG GND
DC-31, 5-4 4-2 REG GND (RM)
DC-31, 5-3 4-3 —
DC-31, 5-1 4-5 REG +12V IN
NC 2-8 —
NC 3-1 —
VP-21, 11-2 3-2 PB Y IN (B)
VP-21, 11-1 3-3 PB Y IN (X)
AU-82, 11-3 5-1 RX DATA IN/OUT (X)
AU-82, 11-2 5-2 RX DATA IN/OUT (B)
AU-82, 11-1 5-3 L:RX JACK OUT
L:EDIT STATUS OUT (2)
L:REC STATUS OUT (3)
L:PAUSE STATUS OUT (17)
L:FUNCTION DISABLE OUT (19)
L:300 REMOTE IN/STAND-BY STATUS OUT (18)
SYSTEM CLOCK OUT (D)
SERIAL DATA OUT (K)
STROBE OUT (J)
L:CASSETTE IN STATUS OUT (7)
L:TAPE STOP OUT (16)
SEARCH SPEED IN (B)
L:TAPE BEGIN OUT (20)
CTL PULSE OUT (15)
DC 6.8V OUT (1)
GND (14)
RX DATA IN/OUT (X) (1)
RX DATA IN/OUT (B) (2)
L:RX JACK IN (3)
300 "L"
+5V

The transistor which is not indicated is DTC144ES.
The diode which is not indicated is 1SS119.

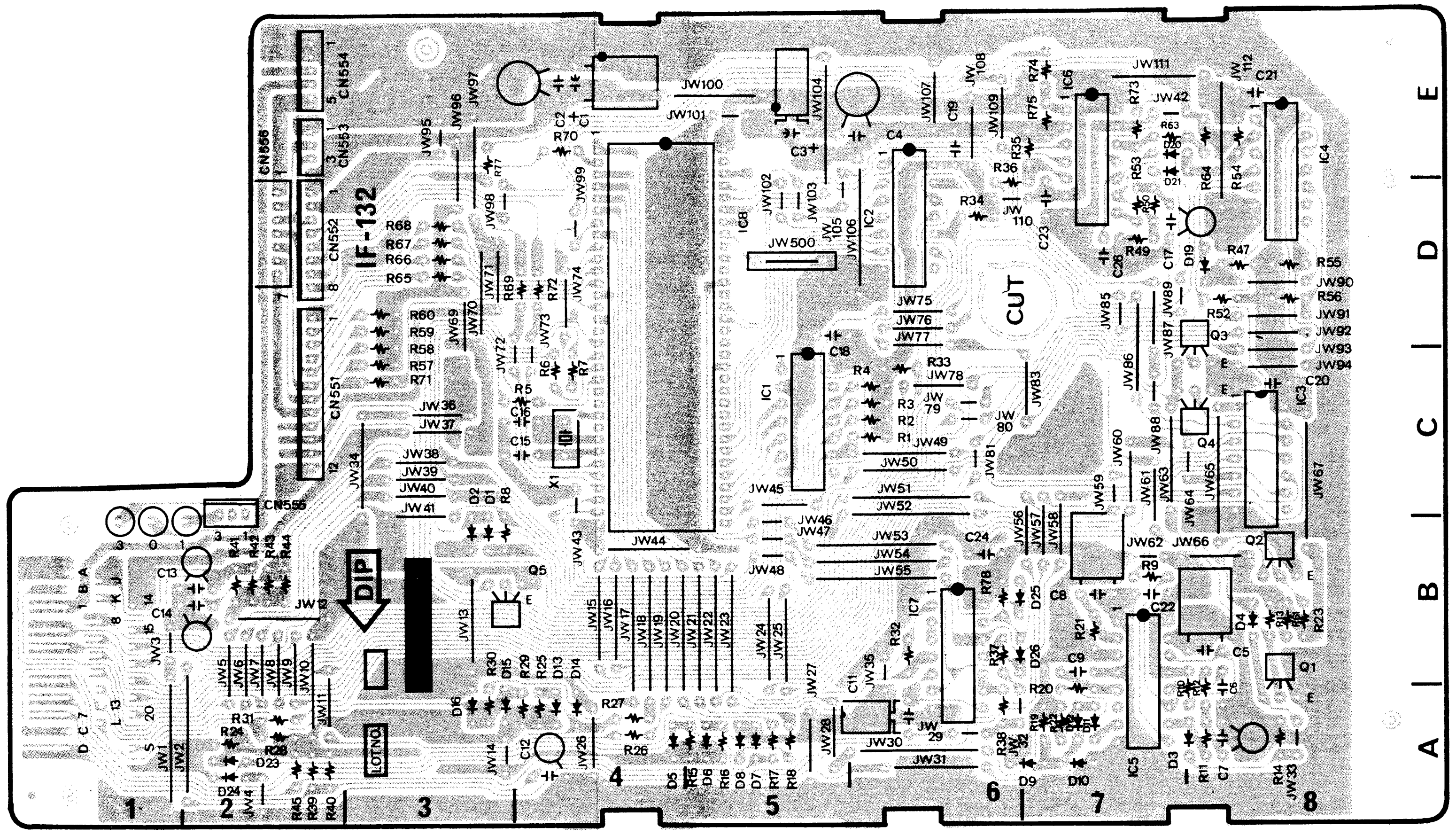
IF-132
1-622-387-12

VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

IF-132; 33P INTERFACE
EK; S/N 11051 and higher

IF-132 (1-622-387-12)

CN551	C-2
CN552	D-2
CN553	E-2
CN554	E-2
CN555	C-2
CN556	D-2
D1	B-3
D2	B-3
D3	A-8
D4	B-8
D5	A-4
D6	A-5
D7	A-5
D8	A-5
D9	A-7
D10	A-7
D13	A-4
D14	A-4
D15	A-3
D16	A-3
D19	D-8
D20	E-7
D21	E-7
D23	A-2
D24	A-2
D25	B-7
D26	B-7
IC1	C-5
IC2	D-6
IC3	C-8
IC4	E-8
IC5	B-7
IC6	E-7
IC7	B-6
IC8	D-4
Q1	B-8
Q2	B-8
Q3	D-8
Q4	C-8
Q5	B-3
X1	C-4


IF-132
DIP
CUT
LOTNO.
CN551
CN552
CN553
CN554
CN555
CN556
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC8
Q1
Q2
Q3
Q4
Q5
X1
1
2
3
4
5
6
7
8
A
B
C
D
E

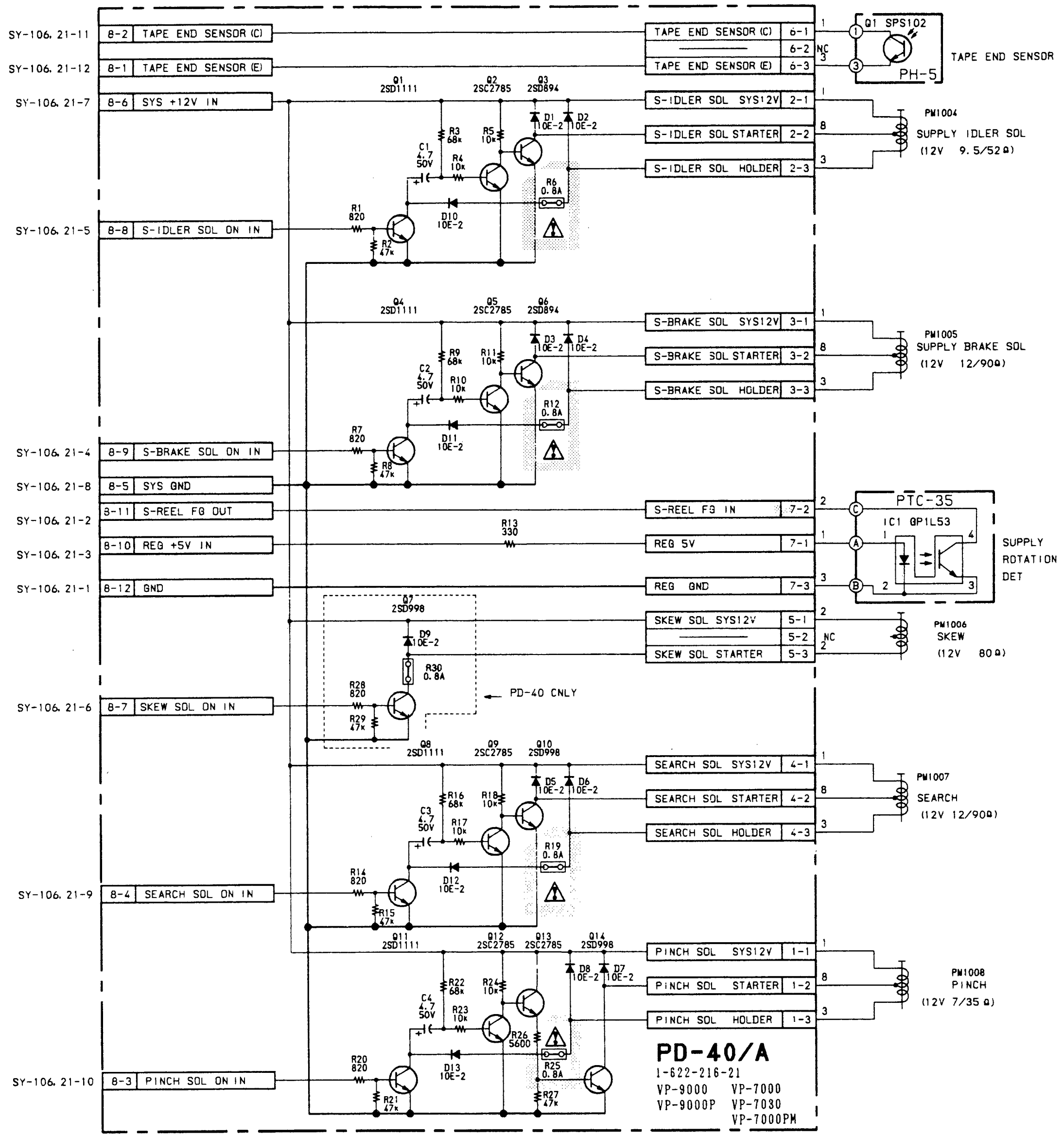
IF-132

-COMPONENT SIDE-

1-622-387-12

VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

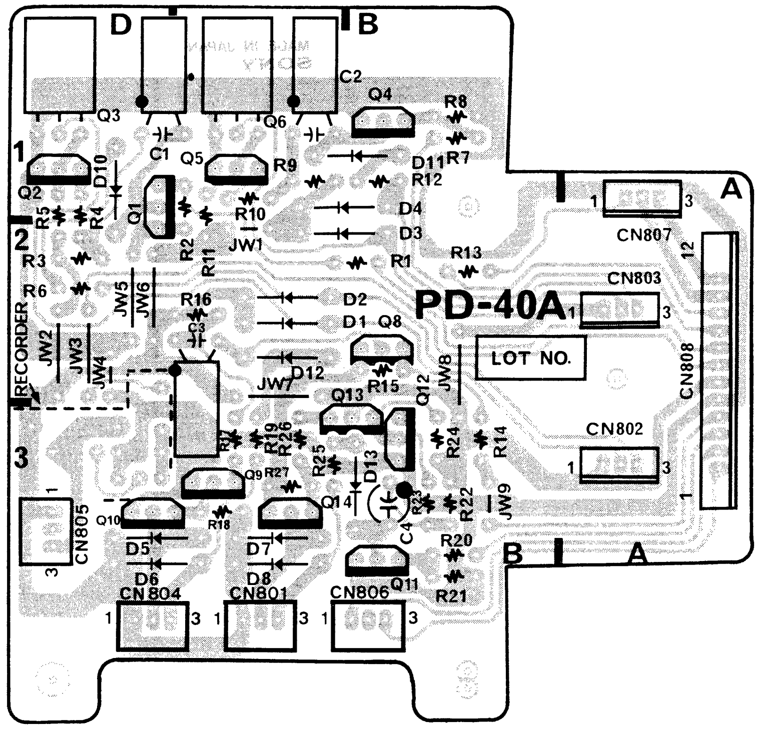
PD-40A; PLUNGER SOLENOIDS


SY-106, 21-11
8-2 TAPE END SENSOR (C)
SY-106, 21-12
8-1 TAPE END SENSOR (E)
SY-106, 21-7
8-6 SYS +12V IN
SY-106, 21-5
8-8 S-IDLER SOL ON IN
SY-106, 21-4
8-9 S-BRAKE SOL ON IN
SY-106, 21-8
8-5 SYS GND
SY-106, 21-2
8-11 S-REEL FG OUT
SY-106, 21-3
8-10 REG +5V IN
SY-106, 21-1
8-12 GND
SY-106, 21-6
8-7 SKEW SOL ON IN
SY-106, 21-9
8-4 SEARCH SOL ON IN
SY-106, 21-10
8-3 PINCH SOL ON IN
Q1 2SD1111
Q2 2SC2785
Q3 2SD894
Q4 2SD1111
Q5 2SC2785
Q6 2SD894
Q7 2SD998
Q8 2SD1111
Q9 2SC2785
Q10 2SD998
Q11 2SD1111
Q12 2SC2785
Q13 2SC2785
Q14 2SD998
R1 820
R2 47k
R3 68k
R4 10k
R5 10k
R6 0.8A
C1 4.7 50V
D1 10E-2
D2 10E-2
D10 10E-2
R7 820
R8 47k
R9 68k
R10 10k
R11 10k
R12 0.8A
C2 4.7 50V
D3 10E-2
D4 10E-2
D11 10E-2
R13 330
D9 10E-2
R30 0.8A
R28 820
R29 47k
PD-40 ONLY
R14 820
R15 47k
R16 68k
R17 10k
R18 10k
R19 0.8A
C3 4.7 50V
D5 10E-2
D6 10E-2
D12 10E-2
R20 820
R21 47k
R22 68k
R23 10k
R24 10k
R25 0.8A
R26 5600
R27 47k
C4 4.7 50V
D7 10E-2
D8 10E-2
D13 10E-2
TAPE END SENSOR (C) 6-1
6-2
TAPE END SENSOR (E) 6-3
S-IDLER SOL SYS12V 2-1
S-IDLER SOL STARTER 2-2
S-IDLER SOL HOLDER 2-3
S-BRAKE SOL SYS12V 3-1
S-BRAKE SOL STARTER 3-2
S-BRAKE SOL HOLDER 3-3
S-REEL FG IN 7-2
REG 5V 7-1
REG GND 7-3
SKEW SOL SYS12V 5-1
5-2
SKEW SOL STARTER 5-3
SEARCH SOL SYS12V 4-1
SEARCH SOL STARTER 4-2
SEARCH SOL HOLDER 4-3
PINCH SOL SYS12V 1-1
PINCH SOL STARTER 1-2
PINCH SOL HOLDER 1-3
NC
Q1 SPS102
PH-5
TAPE END SENSOR
PM1004
SUPPLY IDLER SOL
(12V 9.5/52Ω)
PM1005
SUPPLY BRAKE SOL
(12V 12/90Ω)
PTC-35
IC1 GP1L53
SUPPLY
ROTATION
DET
PM1006
SKEW
(12V 80Ω)
PM1007
SEARCH
(12V 12/90Ω)
PM1008
PINCH
(12V 7/35Ω)
PD-40/A
1-622-216-21
VP-9000 VP-7000
VP-9000P VP-7030
VP-7000PM

NOTE;

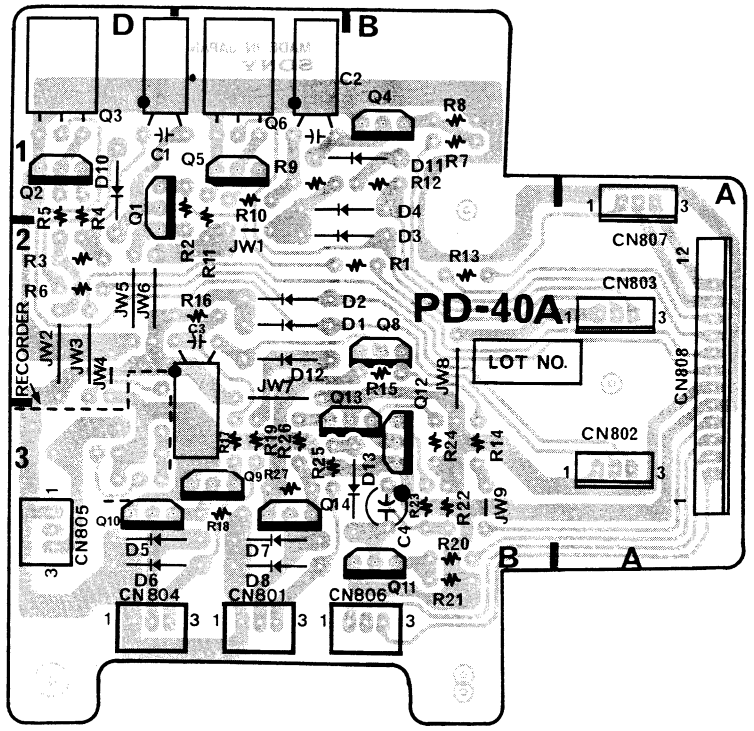
The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

PH-
PTC-


D
B
A
1
2
3
Q1
Q2
Q3
Q4
Q5
Q6
Q8
Q9
Q10
Q11
Q12
Q13
Q14
C1
C2
C3
C4
D1
D2
D3
D4
D5
D6
D7
D8
D10
D11
D12
D13
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
R18
R19
R20
R21
R22
R24
R25
R26
R27
JW1
JW2
JW3
JW4
JW5
JW6
JW7
JW8
JW9
RECORDER
PD-40A
LOT NO.
CN801
CN802
CN803
CN804
CN805
CN806
CN807
CN808

PD-40A
-COMPONENT SIDE-
1-622-216-21
VP-9000 VP-7000
VP-9000P VP-7030
VP-7000PM

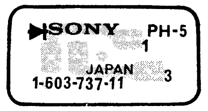
PH-5 ; TAPE BEGINNING/END SENSOR
PTC-35 ; S/T REEL ROTATION DETECTOR


D
B
C2
Q4
R8
Q3
C1
Q5
Q6
R9
D11
R7
R12
1
Q2
D10
R5
R4
Q1
R10
D4
2
R3
R2
R11
JW1
D3
R1
R13
R6
JW5
JW6
R16
D2
C3
D1
Q8
PD-40A
RECORDER
JW2
JW3
JW4
D12
LOT NO.
JW8
Q12
JW7
R15
Q13
R17
R19
R26
R25
R24
R14
3
Q9
R27
D13
Q14
R23
R22
JW9
CN805
Q10
R18
C4
D5
D7
R20
B
A
D6
D8
Q11
R21
CN804
CN801
CN806
CN807
CN803
CN808
CN802
A
12
1
3

PD-40A

-COMPONENT SIDE-

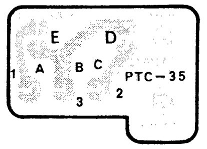
1-622-216-21
VP-9000 VP-7000
VP-9000P VP-7030
VP-7000PM


SONY
PH-5
1
JAPAN
3
1-603-737-11

PH-5

-COMPONENT SIDE-

1-603-737-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


E
D
1
A
B
C
PTC-35
3
2

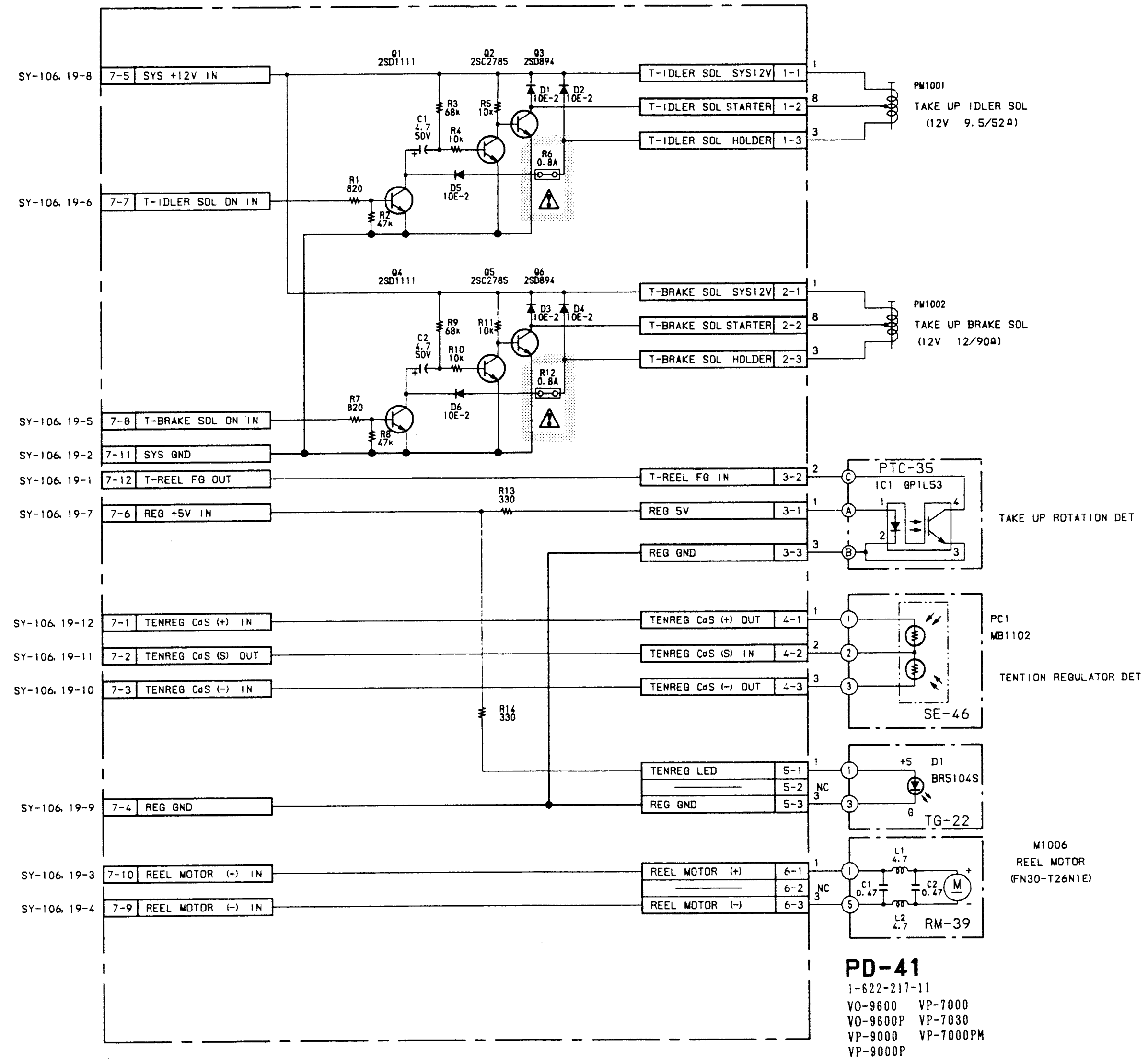
PTC-35

-COMPONENT SIDE-

1-622-218-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

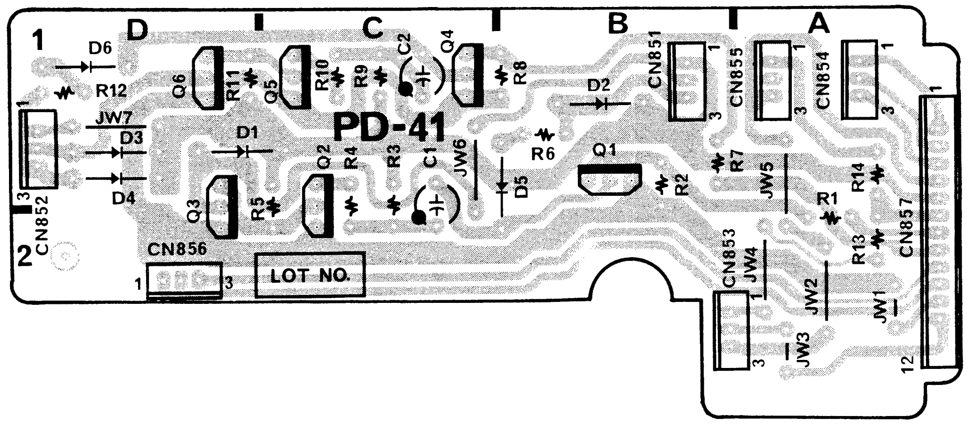
PD-41 ; PLUNGER SOLENOIDS

PTC-3
RM-39
SE-46 ;
TG-22


SY-106, 19-8
7-5 SYS +12V IN
SY-106, 19-6
7-7 T-IDLER SOL ON IN
SY-106, 19-5
7-8 T-BRAKE SOL ON IN
SY-106, 19-2
7-11 SYS GND
SY-106, 19-1
7-12 T-REEL FG OUT
SY-106, 19-7
7-6 REG +5V IN
SY-106, 19-12
7-1 TENREG CdS (+) IN
SY-106, 19-11
7-2 TENREG CdS (S) OUT
SY-106, 19-10
7-3 TENREG CdS (-) IN
SY-106, 19-9
7-4 REG GND
SY-106, 19-3
7-10 REEL MOTOR (+) IN
SY-106, 19-4
7-9 REEL MOTOR (-) IN
Q1 2SD1111
Q2 2SC2785
Q3 2SD894
Q4 2SD1111
Q5 2SC2785
Q6 2SD894
D1 10E-2
D2 10E-2
D3 10E-2
D4 10E-2
D5 10E-2
D6 10E-2
C1 4.7 50V
C2 4.7 50V
R1 820
R2 47k
R3 68k
R4 10k
R5 10k
R6 0.8A
R7 820
R8 47k
R9 68k
R10 10k
R11 10k
R12 0.8A
R13 330
R14 330
T-IDLER SOL SYS12V 1-1
T-IDLER SOL STARTER 1-2
T-IDLER SOL HOLDER 1-3
T-BRAKE SOL SYS12V 2-1
T-BRAKE SOL STARTER 2-2
T-BRAKE SOL HOLDER 2-3
T-REEL FG IN 3-2
REG 5V 3-1
REG GND 3-3
TENREG CdS (+) OUT 4-1
TENREG CdS (S) IN 4-2
TENREG CdS (-) OUT 4-3
TENREG LED 5-1
5-2
REG GND 5-3
REEL MOTOR (+) 6-1
6-2
REEL MOTOR (-) 6-3
NC
PM1001
TAKE UP IDLER SOL
(12V 9.5/52Ω)
PM1002
TAKE UP BRAKE SOL
(12V 12/90Ω)
PTC-35
IC1 GP1L53
TAKE UP ROTATION DET
PC1
MB1102
TENTION REGULATOR DET
SE-46
+5 D1
BR5104S
G
TG-22
M1006
REEL MOTOR
(FN30-T26N1E)
L1 4.7
L2 4.7
C1 0.47
C2 0.47
M
RM-39
PD-41
1-622-217-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.


1
2
D
C
B
A
D6
R12
JW7
D3
D4
D1
Q6
R11
Q5
R10
R9
C2
Q4
R8
PD-41
Q3
R5
Q2
R4
R3
C1
JW6
D5
R6
Q1
D2
R2
R7
JW5
R1
R14
R13
CN851
CN855
CN854
CN852
CN853
CN856
CN857
JW4
JW2
JW1
JW3
LOT NO.
3
12

PD-41
-COMPONENT SIDE-
1-622-217-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

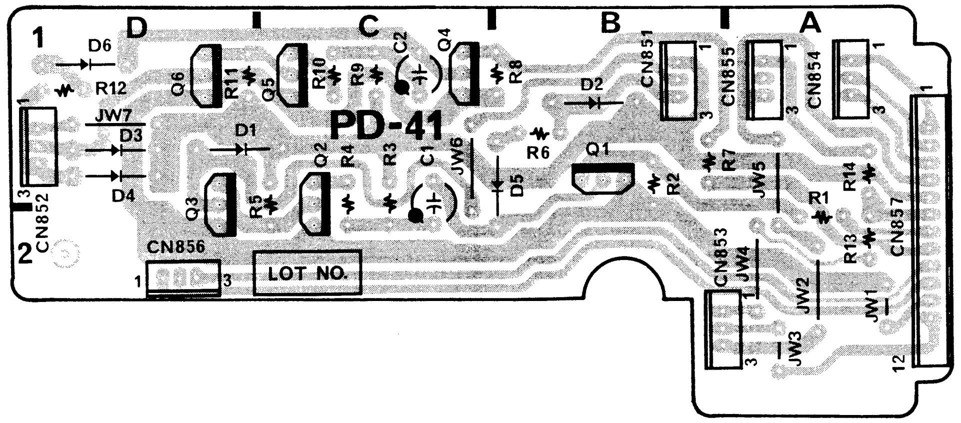
UP ROTATION DET

ON R .ATOR DET

M1006

critical to

ifie

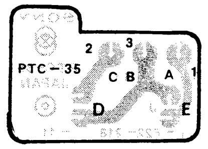

1
2
D
C
B
A
D6
R12
JW7
D3
D4
D1
Q6
R11
Q5
R10
R9
C2
Q4
R8
D2
CN851
CN855
CN854
PD-41
Q3
R5
Q2
R4
R3
C1
JW6
D5
R6
Q1
R2
R7
JW5
R14
R1
R13
CN857
CN852
CN856
LOT NO.
CN853
JW4
JW2
JW3
JW1
1
3
12

PD-41

-COMPONENT SIDE-

1-622-217-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

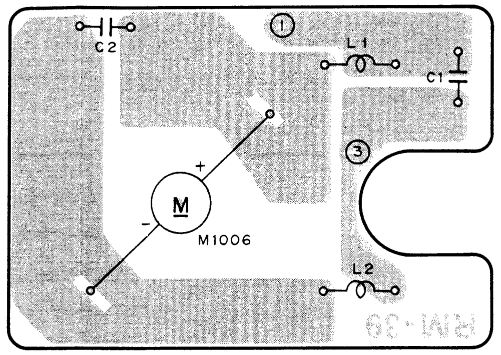
PTC-35 ; S/T REEL ROTATION DETECTOR
RM-39 ; REEL MOTOR
SE-46 ; TENSION REGULATOR DETECTOR
TG-22 ; TENSION REGULATOR LED


PTC-35
2
3
C
B
A
1
D
E

PTC-35

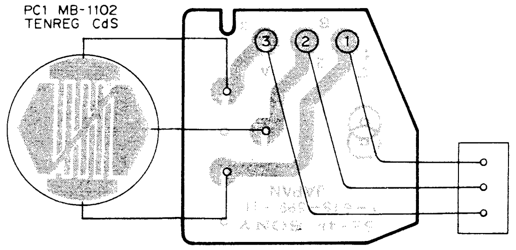
-COMPONENT SIDE-

1-622-218-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


C2
①
L1
C1
③
+
M
−
M1006
L2
RM-39

RM-39 -SOLDERING SIDE-

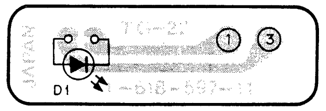
1-618-873-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


PC1 MB-1102
TENREG CdS
③
②
①

SE-46

-SOLDERING SIDE-

1-618-599-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

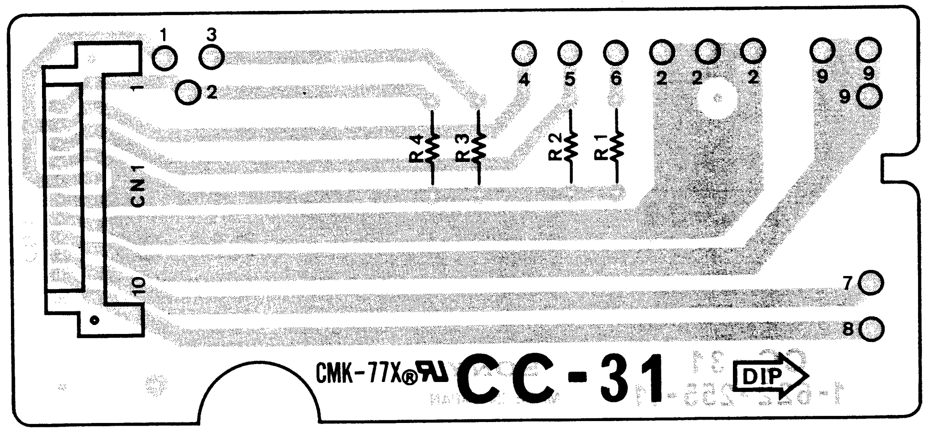

JAPAN
TG-22
D1
①
③
1-618-597-11

TG-22

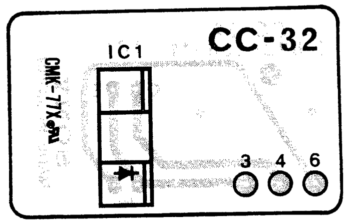
-SOLDERING SIDE-

1-618-597-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

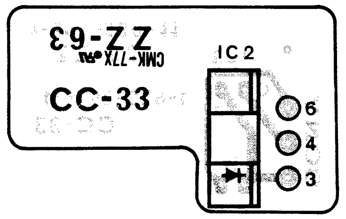
CC-31 ; CASSETTE COMPARTMENT DRIVER
CC-32 ; CASSETTE IN DETECTOR
CC-33 ; CASSETTE DOWN DETECTOR
LP-41 ; CASSETTE COMPARTMENT LIGHT


1
3
2
1
CN1
10
4
5
6
2
2
2
9
9
9
R4
R3
R2
R1
7
8
CMK-77X
CC-31
DIP

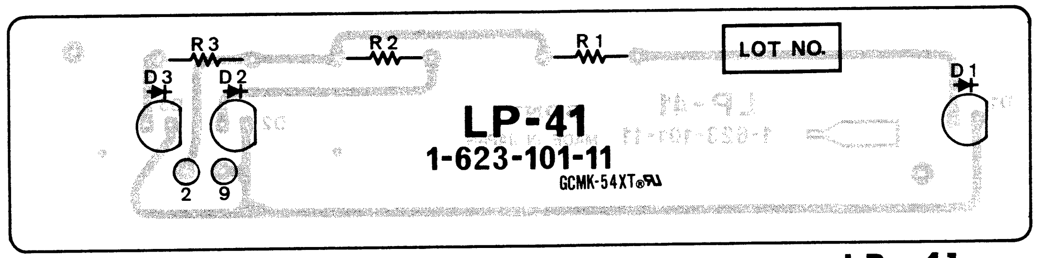
CC-31
-COMPONENT SIDE-
1-622-255-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


IC1
CC-32
CMK-77X
3
4
6

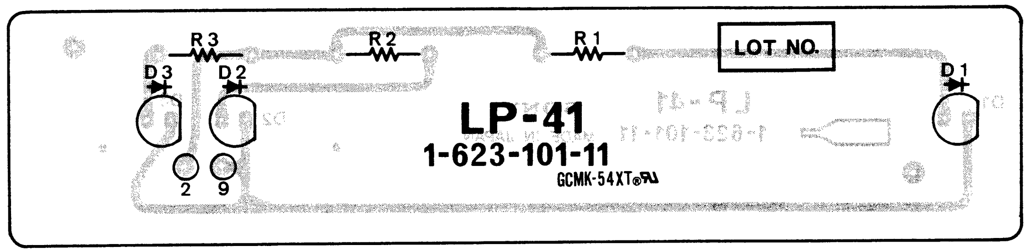
CC-32
-COMPONENT SIDE-
1-622-256-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


ZZ-63
CMK-77X
IC2
CC-33
6
4
3

CC-33
-COMPONENT SIDE-
1-622-257-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


R3
R2
R1
LOT NO.
D3
D2
D1
LP-41
1-623-101-11
GCMK-54XT
2
9

LP-41
-COMPONENT SIDE-
1-623-101-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

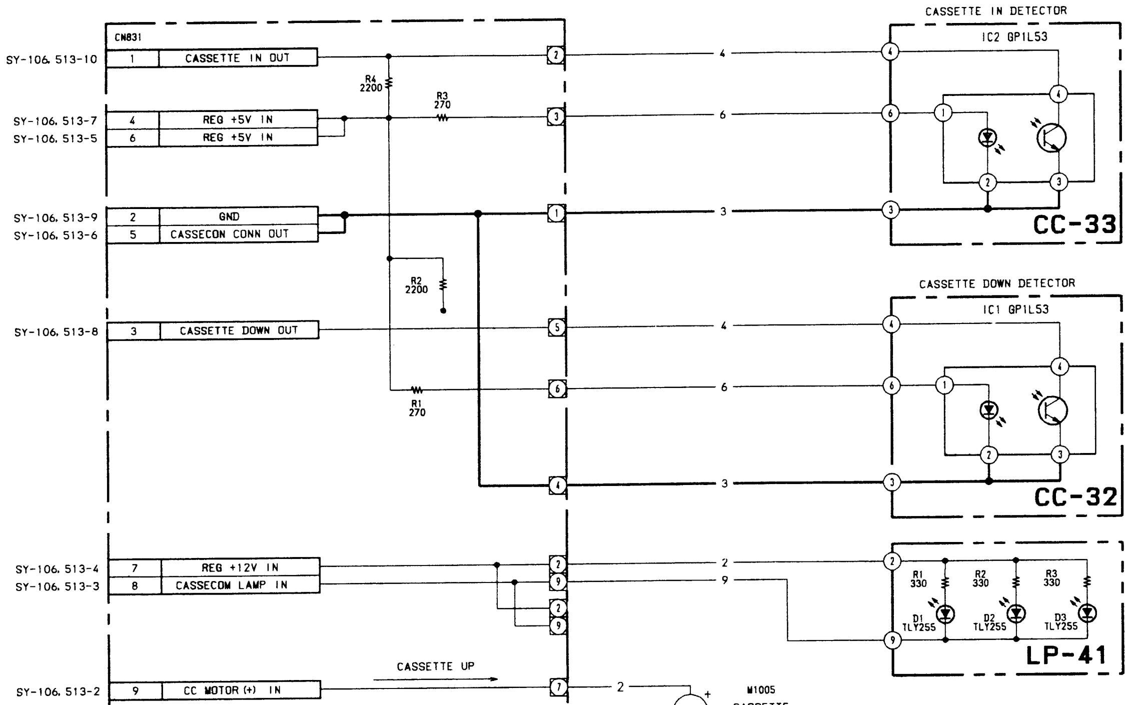

R3
R2
R1
LOT NO.
D3
D2
D1
LP-41
1-623-101-11
GCMK-54XT
2
9

LP-41

-COMPONENT SIDE-

1-623-101-11

VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

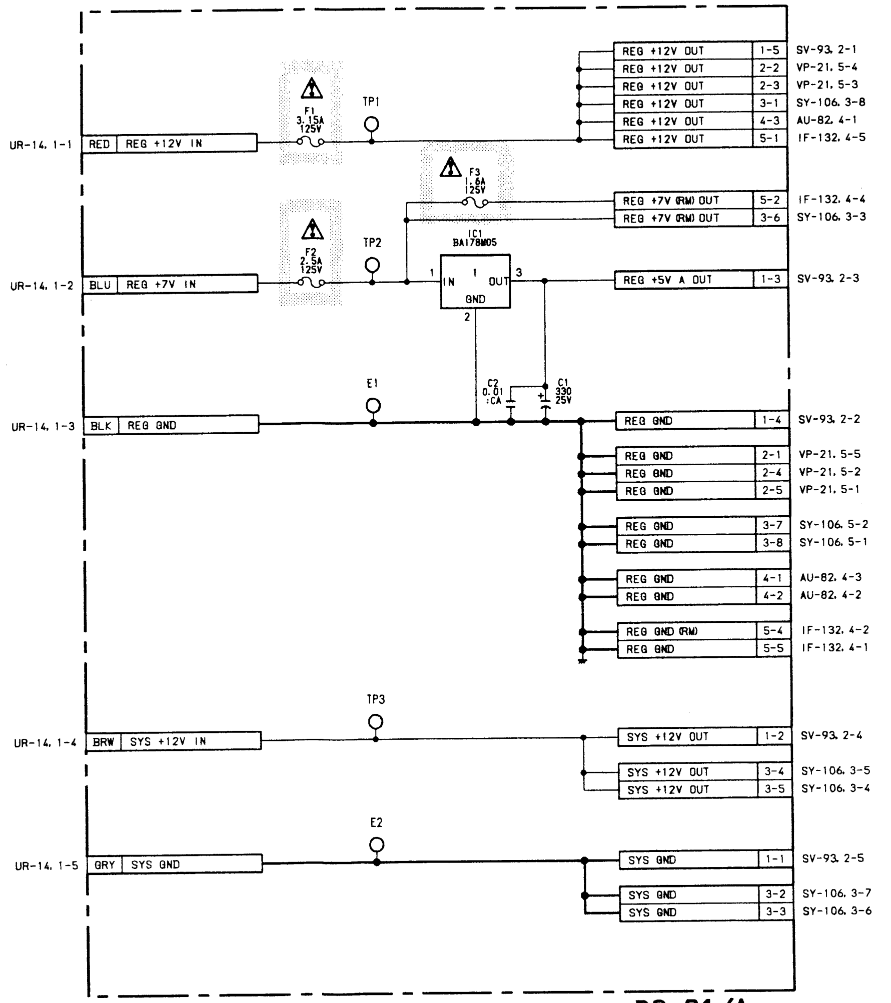

CN831
SY-106, 513-10
1
CASSETTE IN OUT
SY-106, 513-7
SY-106, 513-5
4
REG +5V IN
6
REG +5V IN
SY-106, 513-9
SY-106, 513-6
2
GND
5
CASSECON CONN OUT
SY-106, 513-8
3
CASSETTE DOWN OUT
SY-106, 513-4
SY-106, 513-3
7
REG +12V IN
8
CASSECOM LAMP IN
SY-106, 513-2
9
CC MOTOR (+) IN
SY-106, 513-1
10
CC MOTOR (-) IN
R4
2200
R3
270
R2
2200
R1
270
CASSETTE UP
CASSETTE DOWN
CC-31
M1005
CASSETTE
COMPARTMENT
CASSETTE IN DETECTOR
IC2 GP1L53
CC-33
CASSETTE DOWN DETECTOR
IC1 GP1L53
CC-32
R1
330
R2
330
R3
330
D1
TLY255
D2
TLY255
D3
TLY255
LP-41

CC-31

1-622-255-11

VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

DC-31A; DC SUPPLY

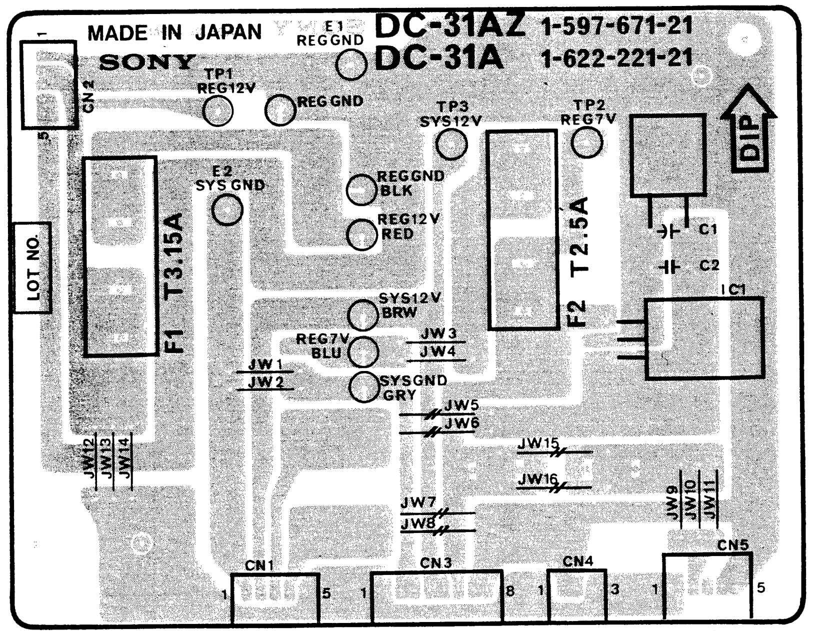

UR-14, 1-1
RED
REG +12V IN
F1
3.15A
125V
TP1
REG +12V OUT 1-5 SV-93, 2-1
REG +12V OUT 2-2 VP-21, 5-4
REG +12V OUT 2-3 VP-21, 5-3
REG +12V OUT 3-1 SY-106, 3-8
REG +12V OUT 4-3 AU-82, 4-1
REG +12V OUT 5-1 IF-132, 4-5
F3
1.6A
125V
REG +7V (RM) OUT 5-2 IF-132, 4-4
REG +7V (RM) OUT 3-6 SY-106, 3-3
UR-14, 1-2
BLU
REG +7V IN
F2
2.5A
125V
TP2
IC1
BA178M05
1
IN
OUT
3
GND
2
REG +5V A OUT 1-3 SV-93, 2-3
E1
C2
0.01
:CA
C1
330
25V
UR-14, 1-3
BLK
REG GND
REG GND 1-4 SV-93, 2-2
REG GND 2-1 VP-21, 5-5
REG GND 2-4 VP-21, 5-2
REG GND 2-5 VP-21, 5-1
REG GND 3-7 SY-106, 5-2
REG GND 3-8 SY-106, 5-1
REG GND 4-1 AU-82, 4-3
REG GND 4-2 AU-82, 4-2
REG GND (RM) 5-4 IF-132, 4-2
REG GND 5-5 IF-132, 4-1
TP3
UR-14, 1-4
BRW
SYS +12V IN
SYS +12V OUT 1-2 SV-93, 2-4
SYS +12V OUT 3-4 SY-106, 3-5
SYS +12V OUT 3-5 SY-106, 3-4
E2
UR-14, 1-5
GRY
SYS GND
SYS GND 1-1 SV-93, 2-5
SYS GND 3-2 SY-106, 3-7
SYS GND 3-3 SY-106, 3-6

* NOTE
F1 AND F2 ARE 250V FOR EK.
F3 IS DELETED FOR EK.

DC-31/A
1-622-221-11/-21
VO-9600
VP-9000
VO-9600P
VP-9000P

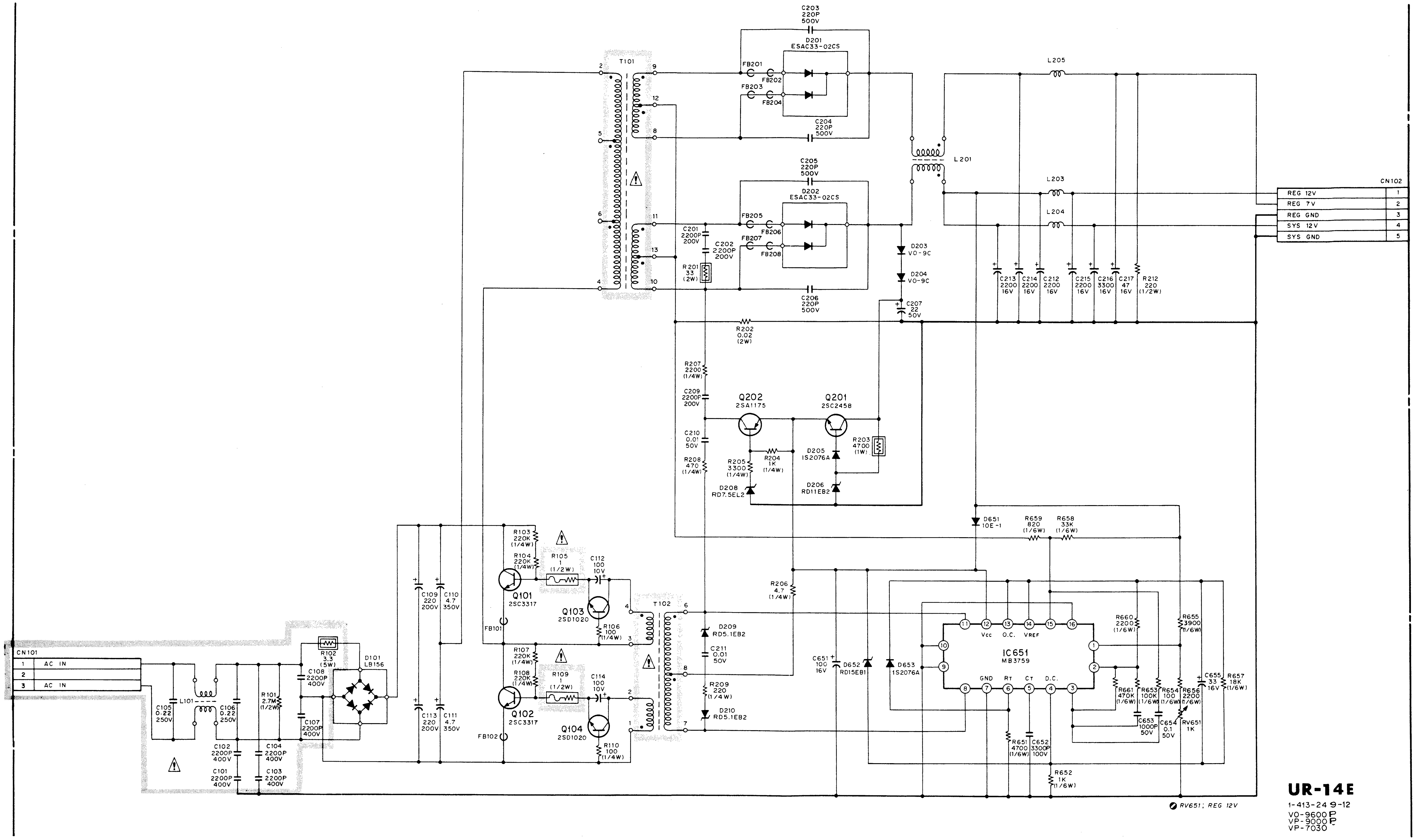
NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.


MADE IN JAPAN
SONY
E1
REGGND
DC-31AZ 1-597-671-21
DC-31A 1-622-221-21
CN2
1
5
TP1
REG12V
REG GND
TP3
SYS12V
TP2
REG7V
DIP
E2
SYS GND
REGGND
BLK
REG12V
RED
LOT NO.
F1 T3.15A
F2 T2.5A
C1
C2
IC1
SYS12V
BRW
REG7V
BLU
SYSGND
GRY
JW1
JW2
JW3
JW4
JW5
JW6
JW7
JW8
JW9
JW10
JW11
JW12
JW13
JW14
JW15
JW16
CN1
CN3
CN4
CN5
1
5
1
8
1
3
1
5

DC-31A
-COMPONENT SIDE-
1-622-221-21
VP-9000
VP-9000P

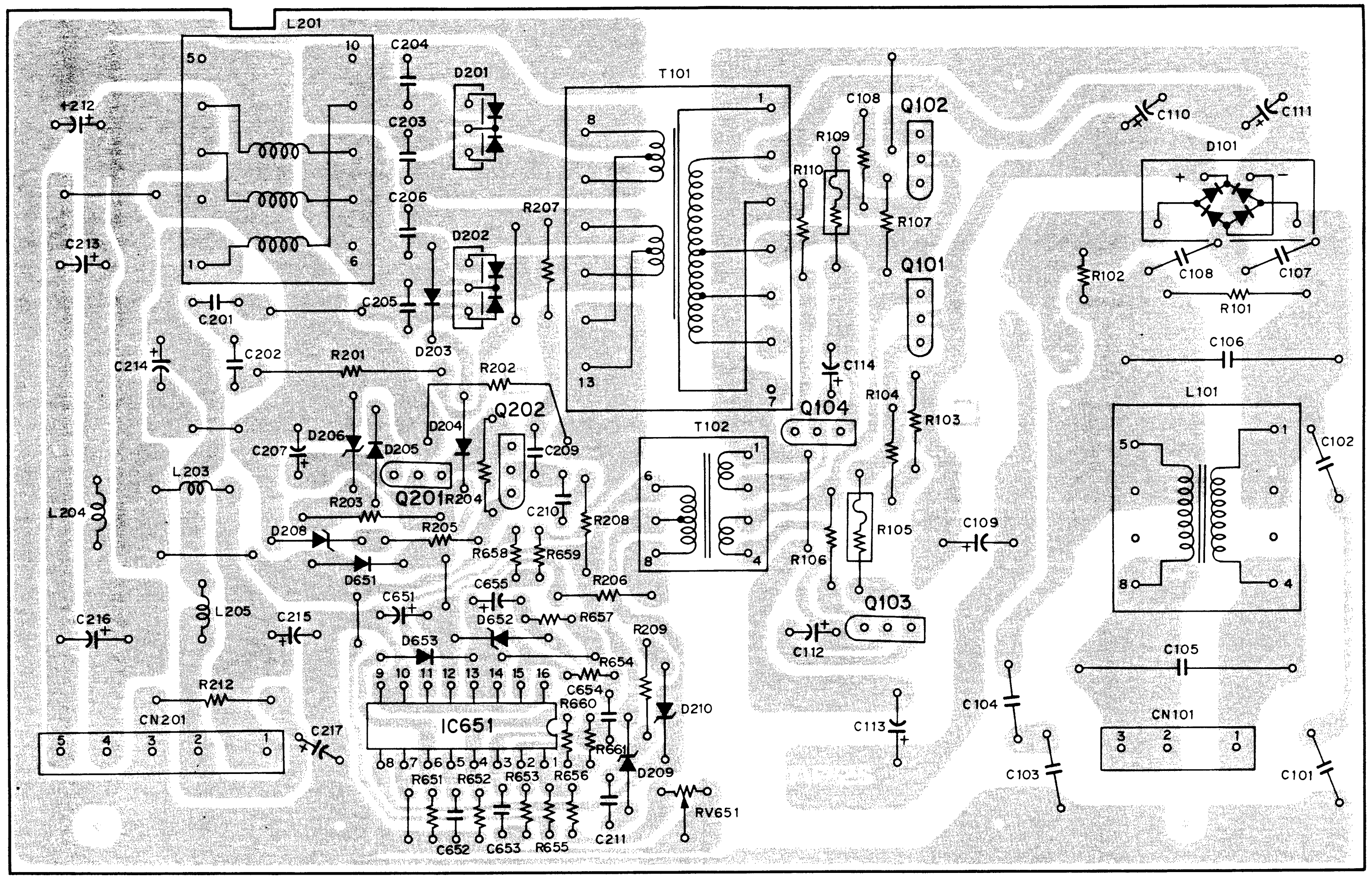
UR-14E; SWITCHING REGULATOR

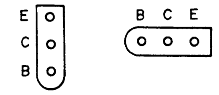

T101
C203 220P 500V
D201 ESAC33-02CS
FB201
FB202
FB203
FB204
C204 220P 500V
C205 220P 500V
D202 ESAC33-02CS
FB205
FB206
FB207
FB208
C201 2200P 200V
C202 2200P 200V
R201 33 (2W)
C206 220P 500V
D203 VO-9C
D204 VO-9C
C207 22 50V
L201
L205
L203
L204
C213 2200 16V
C214 2200 16V
C212 2200 16V
C215 2200 16V
C216 3300 16V
C217 47 16V
R212 220 (1/2W)
CN102
REG 12V 1
REG 7V 2
REG GND 3
SYS 12V 4
SYS GND 5
R202 0.02 (2W)
R207 2200 (1/4W)
C209 2200P 200V
Q202 2SA1175
Q201 2SC2458
C210 0.01 50V
R208 470 (1/4W)
R205 3300 (1/4W)
R204 1K (1/4W)
D205 1S2076A
R203 4700 (1W)
D208 RD7.5EL2
D206 RD11EB2
D651 10E-1
R659 820 (1/6W)
R658 33K (1/6W)
R103 220K (1/4W)
R104 220K (1/4W)
R105 1 (1/2W)
C112 100 10V
Q101 2SC3317
Q103 2SD1020
R106 100 (1/4W)
FB101
C109 220 200V
C110 4.7 350V
T102
R206 4.7 (1/4W)
D209 RD5.1EB2
C211 0.01 50V
R209 220 (1/4W)
D210 RD5.1EB2
C651 100 16V
D652 RD15EB1
D653 1S2076A
IC651 MB3759
Vcc O.C. VREF
GND RT CT D.C.
R660 2200 (1/6W)
R655 3900 (1/6W)
C655 33 16V
R657 18K (1/6W)
R661 470K (1/6W)
R653 100K (1/6W)
R654 100 (1/6W)
R656 2200 (1/6W)
C653 1000P 50V
C654 0.1 50V
RV651 1K
R651 4700 (1/6W)
C652 3300P 100V
R652 1K (1/6W)
CN101
1 AC IN
2
3 AC IN
R102 3.3 (5W)
D101 LB156
C108 2200P 400V
R101 2.7M (1/2W)
C105 0.22 250V
L101
C106 0.22 250V
C107 2200P 400V
C102 2200P 400V
C104 2200P 400V
C101 2200P 400V
C103 2200P 400V
R107 220K (1/4W)
R108 220K (1/4W)
R109 1 (1/2W)
C114 100 10V
Q102 2SC3317
Q104 2SD1020
R110 100 (1/4W)
FB102
C113 220 200V
C111 4.7 350V
RV651; REG 12V
UR-14E
1-413-249-12
VO-9600P
VP-9000P
VP-7030

NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

UR-14E; SWITCHING REGULATOR


L201
5
10
1
6
C204
D201
C203
C206
D202
R207
C205
D203
C212
C213
C201
C202
C214
R201
R202
Q202
D204
D205
D206
C207
C209
Q201
R204
R203
L203
L204
C210
R208
D208
R205
R658
R659
D651
C655
R206
C651
D652
R657
C216
L205
C215
D653
R209
R654
9 10 11 12 13 14 15 16
R660
C654
IC651
R661
D210
8 7 6 5 4 3 2 1
D209
R651 R652 R653 R656
RV651
C652 C653 R655
C211
R212
CN201
5 4 3 2 1
C217
T101
1
8
13
7
C108
Q102
R109
R110
R107
Q101
C114
R104
R103
Q104
T102
6
8
1
4
R105
R106
C109
Q103
C112
C113
C104
C103
C110
C111
D101
+
−
R102
C108
C107
R101
C106
L101
5
1
8
4
C102
C105
CN101
3 2 1
C101

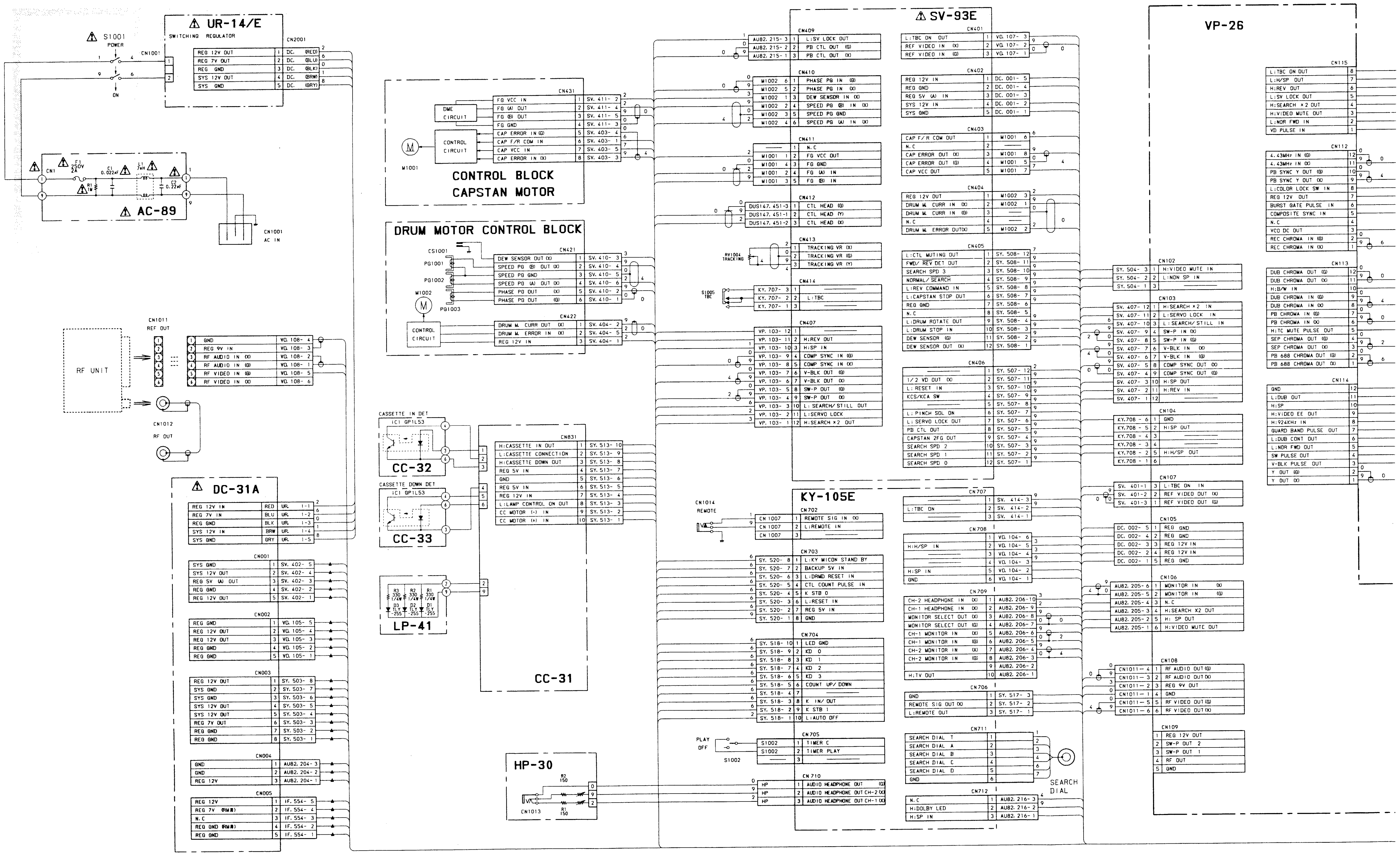


UR-14E —SOLDERING SIDE—

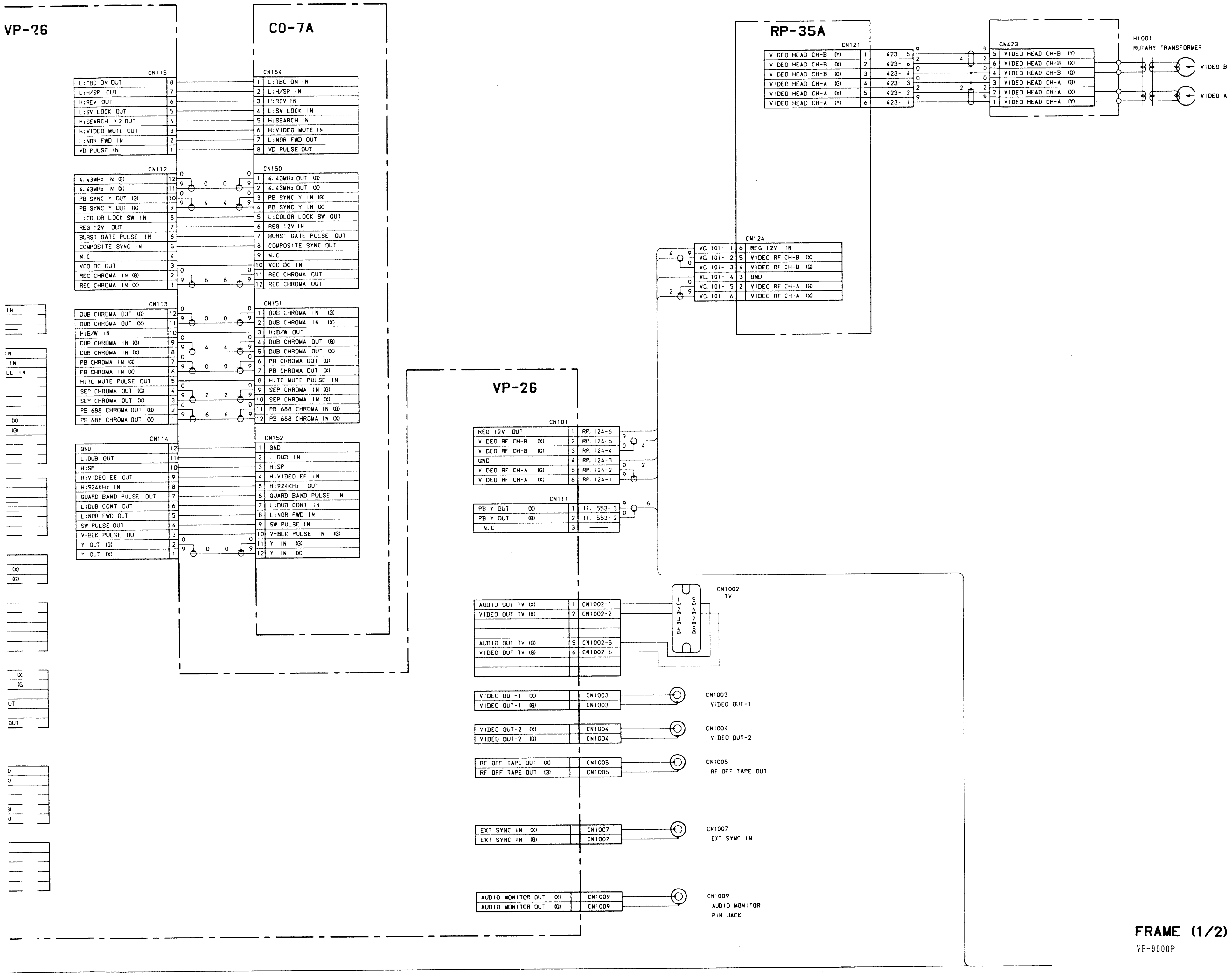
1-413-249-12

VO-9600P
VP-9000P

FRAME(½)



UR-14/E
SWITCHING REGULATOR
S1001 POWER
CN1001
CN2001
AC-89
CN1001 AC IN
RF UNIT
CN1011 REF OUT
CN1012 RF OUT
DC-31A
CN001
CN002
CN003
CN004
CN005
CONTROL BLOCK
CAPSTAN MOTOR
CN431
DME CIRCUIT
CONTROL CIRCUIT
M1001
DRUM MOTOR CONTROL BLOCK
CN421
CN422
CS1001
PG1001
PG1002
PG1003
M1002
CASSETTE IN DET
CC-32
CASSETTE DOWN DET
CC-33
LP-41
CC-31
CN831
HP-30
CN1013
SV-93E
CN409
CN410
CN411
CN412
CN413
CN414
CN407
CN401
CN402
CN403
CN404
CN405
CN406
RV1004 TRACKING
S1005 TBC
KY-105E
CN1014 REMOTE
CN702
CN703
CN704
CN705
CN710
CN707
CN708
CN709
CN706
CN711
CN712
PLAY OFF
S1002
SEARCH DIAL
VP-26
CN102
CN103
CN104
CN105
CN106
CN107
CN108
CN109
CN111
CN112
CN113
CN114
CN115


VP-26
CO-7A
CN115
CN154
L:TBC ON OUT
L:H/SP OUT
H:REV OUT
L:SV LOCK OUT
H:SEARCH ×2 OUT
H:VIDEO MUTE OUT
L:NOR FWD IN
VD PULSE IN
CN112
CN150
CN113
CN151
CN114
CN152
RP-35A
CN121
CN423
CN124
H1001
ROTARY TRANSFORMER
VIDEO B
VIDEO A
VIDEO HEAD CH-B
VIDEO HEAD CH-A
VP-26
CN101
CN111
REG 12V OUT
VIDEO RF CH-B
VIDEO RF CH-A
GND
PB Y OUT
N.C
CN1002
TV
AUDIO OUT TV
VIDEO OUT TV
CN1003
VIDEO OUT-1
CN1004
VIDEO OUT-2
CN1005
RF OFF TAPE OUT
CN1007
EXT SYNC IN
CN1009
AUDIO MONITOR OUT
AUDIO MONITOR
PIN JACK

FRAME (1/2)

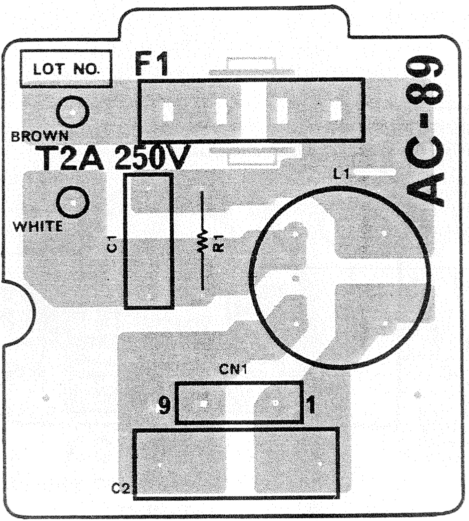
VP-9000P

NOTE;

The shaded and ⚠-marked components are critical to safety.

Replace only with same components as specified.

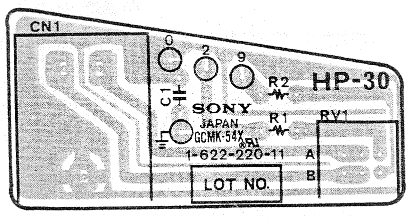
AC-89 ; AC INPUT
HP-30 ; HEADPHONES


LOT NO.
F1
BROWN
T2A 250V
WHITE
C1
R1
L1
AC-89
CN1
9
1
C2

AC-89

-COMPONENT SIDE-

1-622-786-11
VO-9600P
VP-9000P

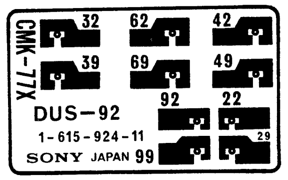

CN1
0
2
9
C1
SONY
JAPAN
GCMK-54X
R2
HP-30
R1
RV1
1-622-220-11
A
B
LOT NO.

HP-30

-COMPONENT SIDE-

1-622-220-11
VO-9600
VO-9600P
VP-9000
VP-9000P

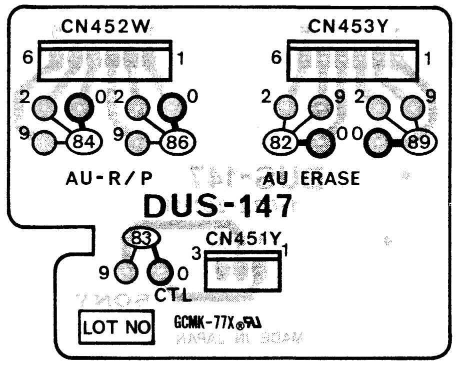
DUS-92; AUDIO CTL HEAD
DUS-147; AUDIO CTL HEAD
PT-9; REEL MOTOR DRIVER


CMK-77X
32
62
42
39
69
49
92
22
29
DUS-92
1-615-924-11
SONY JAPAN 99

DUS-92

-SOLDERING SIDE-

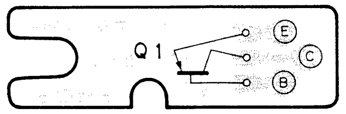
1-615-924-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


CN452W
CN453Y
6
1
2
0
9
84
86
82
00
89
AU-R/P
AU ERASE
DUS-147
83
CN451Y
3
CTL
LOT NO
GCMK-77X

DUS-147

-COMPONENT SIDE-

1-622-261-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

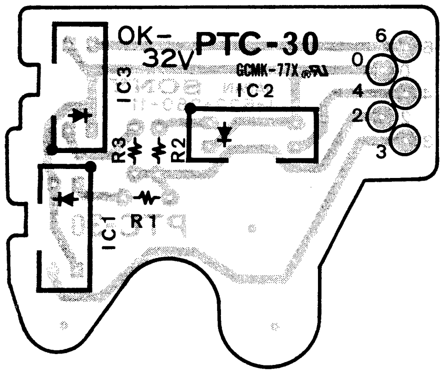


PT-9

- SOLDERING SIDE -

1-605-018-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

EC-28: CTL HEAD
LM-13: THREADING MOTOR
PTC-30: SP,MISS REC. KCA DETECTOR
PTC-33: FR STOP DETECTOR
PTC-34: UNTHREADEND DETECTOR

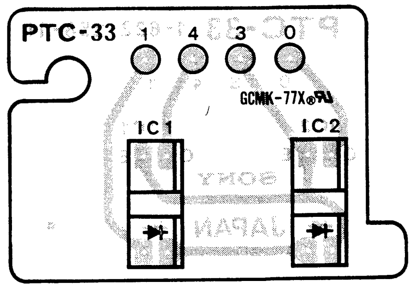

OK-32V
PTC-30
GCMK-77X
IC3
IC2
IC1
R3
R2
R1
6
0
4
2
3

PTC-30

-COMPONENT SIDE-

1-622-260-11

VO-9600
VO-9600P
VP-9000
VP-9000P

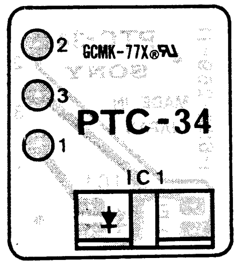

PTC-33
1
4
3
0
GCMK-77X
IC1
IC2

PTC-33

-COMPONENT SIDE-

1-622-258-11

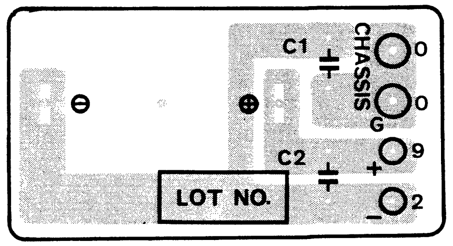
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


2
3
1
GCMK-77X
PTC-34
IC1

PTC-34

-COMPONENT SIDE-

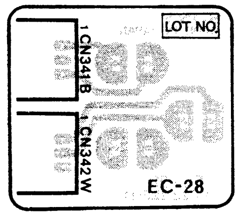
1-622-259-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P


C1
CHASSIS
G
0
0
9
2
C2
+
_
LOT NO.

LM-13

-COMPONENT SIDE-

1-618-600-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

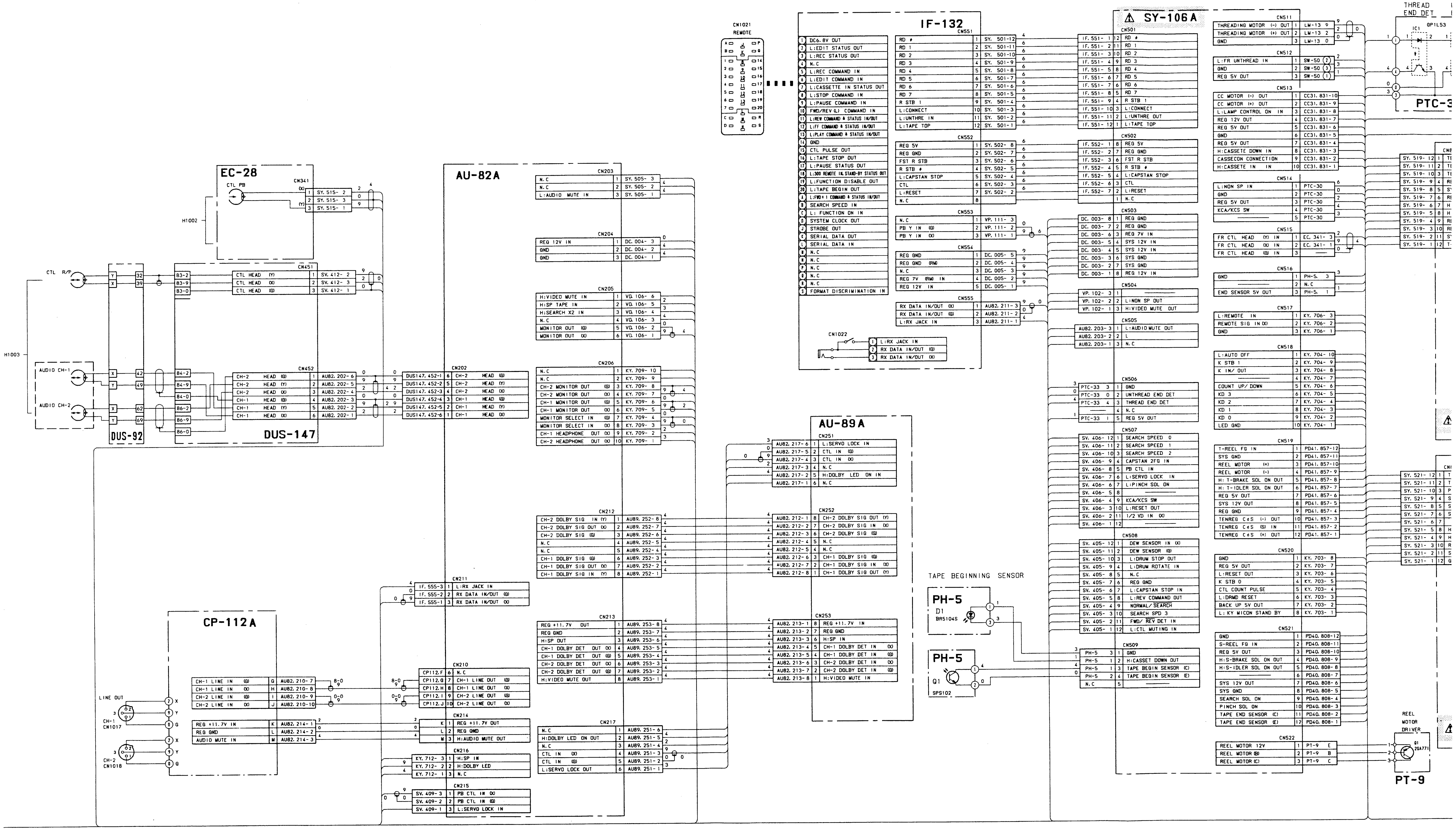

LOT NO.
1 CN341B
1 CN342W
EC-28

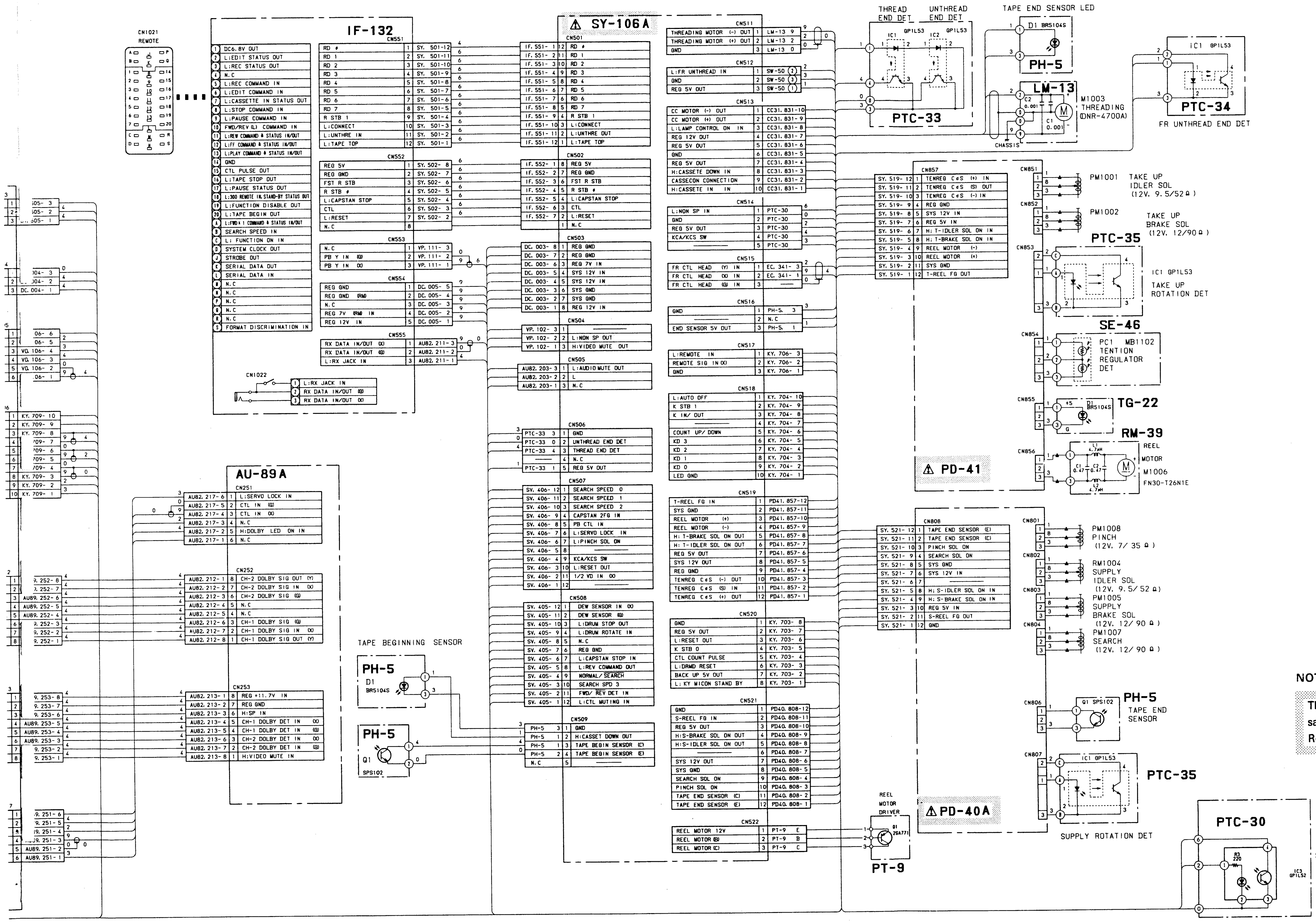
EC-28

-COMPONENT SIDE-

1-622-223-11
VO-9600 VP-7000
VO-9600P VP-7030
VP-9000 VP-7000PM
VP-9000P

FRAME(2/2)


EC-28
AU-82A
IF-132
SY-106A
DUS-92
DUS-147
CP-112A
AU-89A
PH-5
PH-5
PT-9
PTC-3
TAPE BEGINNING SENSOR
THREAD END DET
REEL MOTOR DRIVER
CN1021 REMOTE
CN1022
LINE OUT
CH-1 CN1017
CH-2 CN1018
CTL R/P
AUDIO CH-1
AUDIO CH-2
H1002
H1003


IF-132
⚠ SY-106A
AU-89A
⚠ PD-41
⚠ PD-40A
PT-9
PTC-33
PTC-34
PTC-35
PTC-30
PH-5
LM-13
SE-46
TG-22
RM-39
CN1021 REMOTE
CN1022
THREAD END DET
UNTHREAD END DET
TAPE END SENSOR LED
FR UNTHREAD END DET
M1003 THREADING (DNR-4700A)
CHASSIS
PM1001 TAKE UP IDLER SOL (12V, 9.5/52Ω)
PM1002 TAKE UP BRAKE SOL (12V, 12/90Ω)
IC1 GP1LS3 TAKE UP ROTATION DET
PC1 MB1102 TENTION REGULATOR DET
REEL MOTOR M1006 FN30-T26N1E
PM1008 PINCH (12V, 7/35Ω)
RM1004 SUPPLY IDLER SOL (12V, 9.5/52Ω)
PM1005 SUPPLY BRAKE SOL (12V, 12/90Ω)
PM1007 SEARCH (12V, 12/90Ω)
TAPE END SENSOR
SUPPLY ROTATION DET
SP SW
TAPE BEGINNING SENSOR
REEL MOTOR DRIVER

FRAME (2/2)
VP-9000P

NOTE;

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

SECTION 15
SPARE PARTS AND FIXTURE

15-1. PARTS INFORMATION

(1)

> The shaded and ⚠ -marked components are critical to safety.
> Replace only with same components as specified.

(2) Replacement Parts supplied from the Sony Parts Center will sometimes have a different shape from the original parts. This is due to "improved parts and/or engineering changes" or "standardization of genuine parts".
This manual's exploded views and electrical spare parts list indicate the part numbers of "the standardized genuine parts at the present". Regarding engineering part changes by the engineering department, refer to Sony service bulletins and service manual supplements.

(3) The parts marked with "s" in the SP column of the exploded views and electrical spare parts lists are normally stocked for replacement purposes. The parts marked with "o" in the SP column are not normally required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional delivery time.

(4) Items with no part number and/or no description are not stocked because they are seldom required for routine service.

(5) (T) after a spring description is shown on the exploded views in order to indicate the number of spring turns required for the use. (Example)
Spring, tension (24T); This spring must be cut at its 24th turn for actual use.

15-2. EXPLODED VIEW

. Exploded vews are composed of the following blocks.

(1) Reel Chassis (1), Supply Side
- S Reel Table
- S Tension Regulator Arm
- Search Solenoid
- S Main Brake
- Reel Motor

(2) Reel Chassis (2), Take-up Side
- T Reel Table
- FF/REW Idler
- T Main brake
- T Tension Regulator Arm
- R Brake

(3) Reel Chassis (3), Back Side
- S Idler Solenoid
- T Idler Solenoid
- FF/REW Pulley
- S Brake Solenoid
- T Brake Solenoid

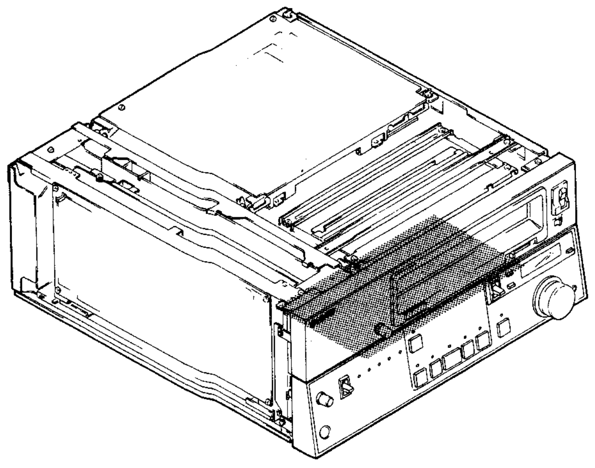
(4) Threading Ring Block
- Threading Ring
- Gear Box
- T Correction Guide
- Tape Beginning Sensor
- FR Detector

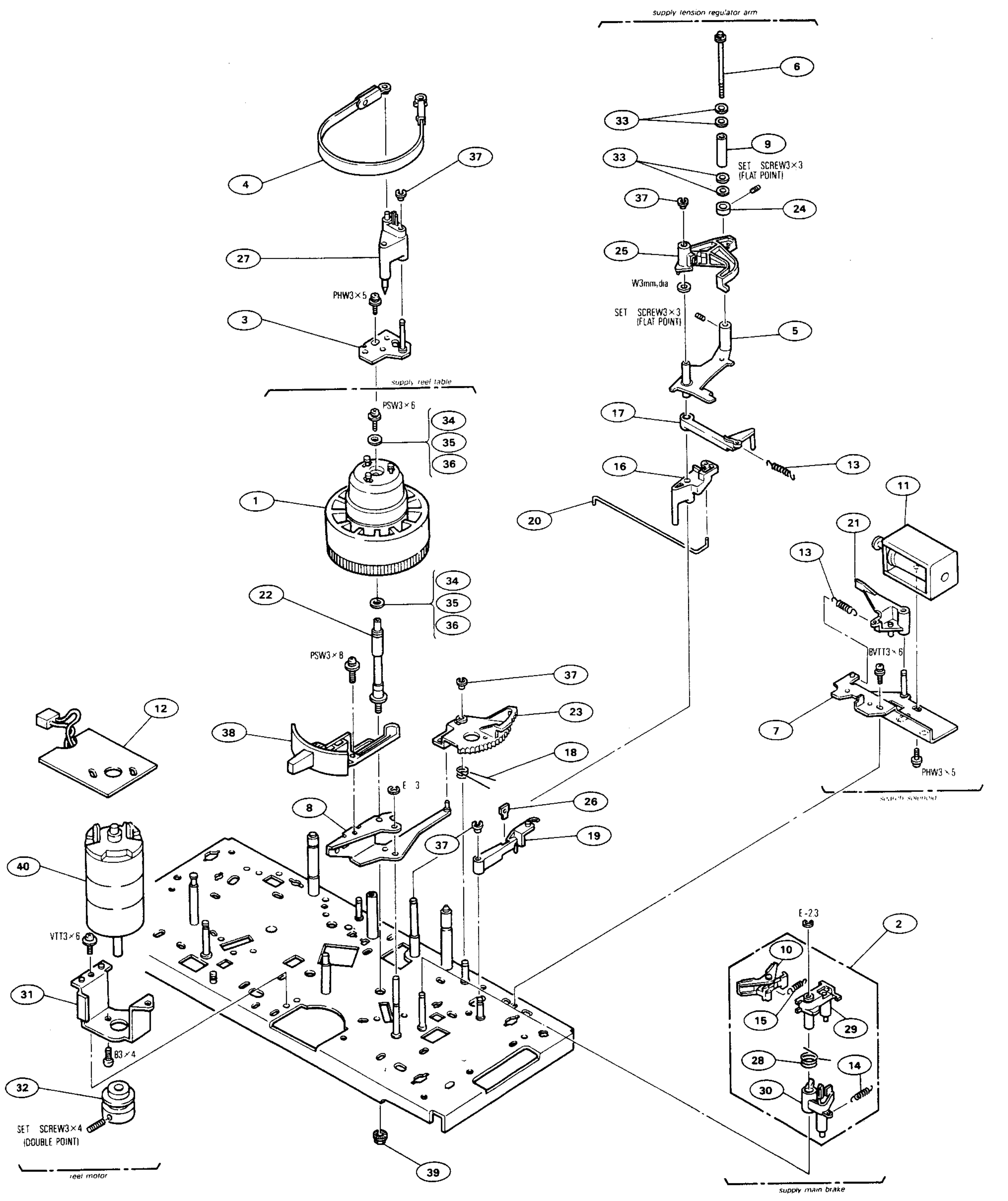
(5) Threading Arm
- T Drawer Arm
- S Drawer Arm
- S Drawer Roller
- Drawer Lever

(6) Drum and Capstan Blocks
- Head Drum
- Capstan Motor
- Audio/ CTL Head
- Tape Guides

- (7) Erase Head Base
  - Erase Head Base
  - S Guard
- (8) Pinch Lever and Pinch Solenoid Blocks
  - Pinch Lever
  - Pinch Roller Pre-set Cam
  - Pinch Solenoid
- (9) Cassette-up Compartment Block
- (10) Function Control
  - Function Control Board
- (11) Front Panel Block
  - Ornamental Front Panel
  - Key Top
- (12) Chassis Block (1), Left Side
  - Printed Circuit Boards
- (13) Chassis Block (2), Back Side
  - Printed Circuit Boards
  - Connector Panel for Video Signal
- (14) Level Control Panel
  - Meter Panel
  - Headphone Block
- (15) Switching Regulator
- (16) Connector Panel for Audio Signal
- (17) Chassis Block (3), Bottom
  - Printed Circuit Boards
- (18) Ornamental Panel Block
  - U Case
  - Bottom Plate

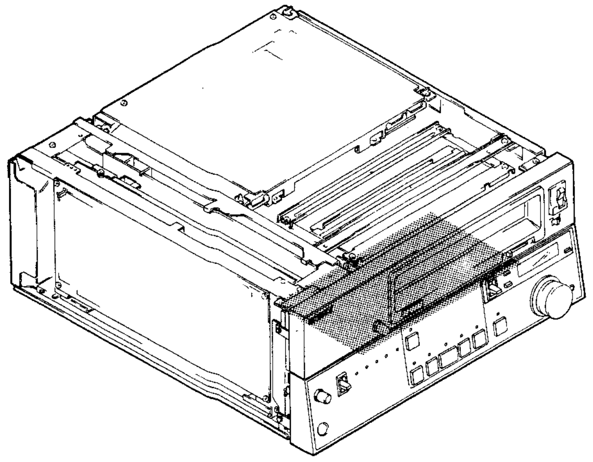
REEL CHASSIS (1), SUPPLY SIDE

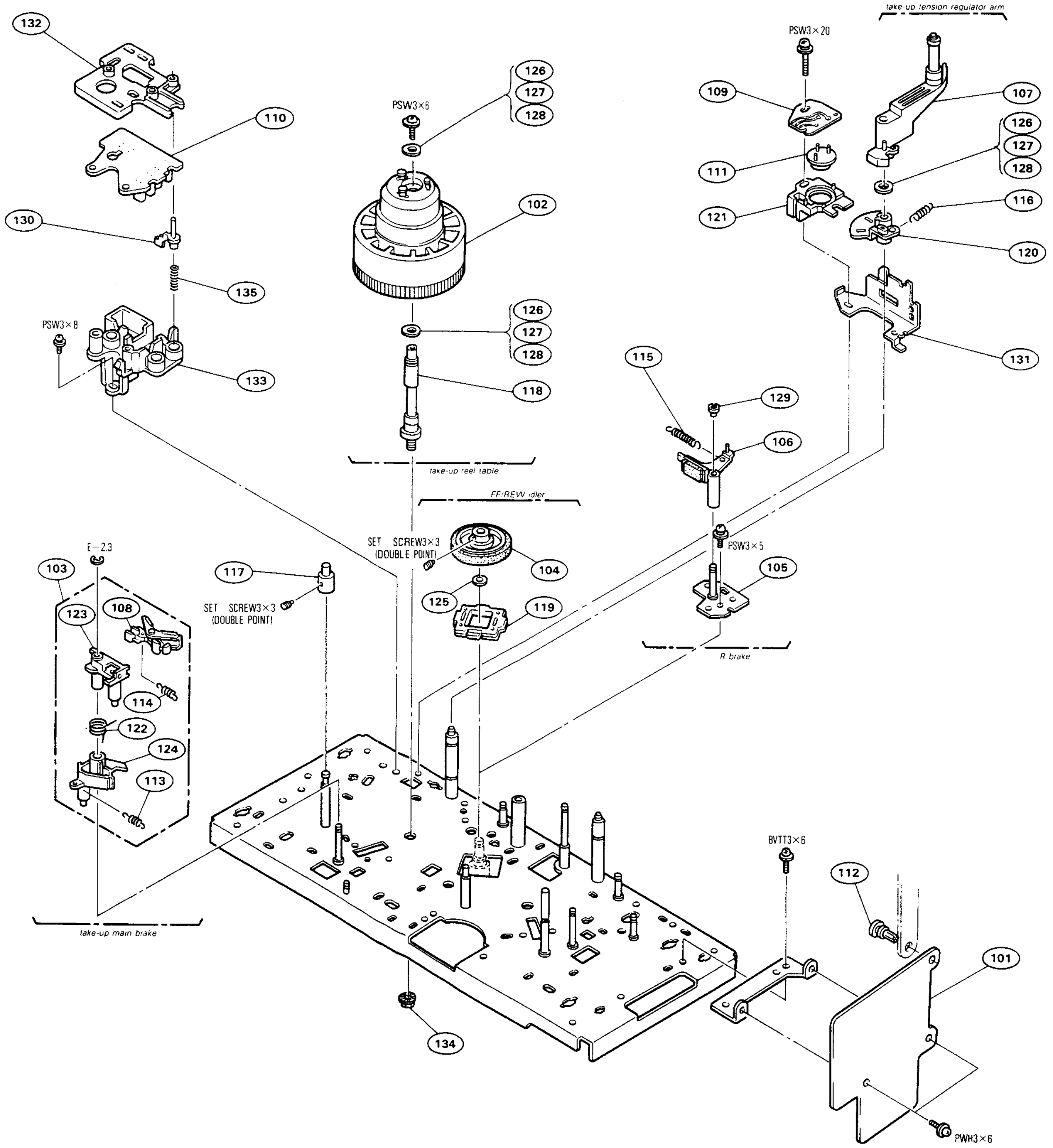



supply tension regulator arm
6
33
9
SET SCREW3×3 (FLAT POINT)
33
37
24
25
W3mm.dia
SET SCREW3×3 (FLAT POINT)
5
17
13
16
20
4
37
27
PHW3×5
3
supply reel table
PSW3×6
34
35
36
1
34
35
36
22
PSW3×8
37
23
18
38
12
11
21
13
BVTT3×6
7
PHW3×5
search solenoid
8
E 3
26
37
19
40
VTT3×6
31
B3×4
32
SET SCREW3×4 (DOUBLE POINT)
reel motor
39
E-23
2
10
15
29
28
14
30
supply main brake

No.	Part No.	SP	Description
1	A-6739-016-C	s	TABLE ASSY, REEL
2	A-6741-038-B	s	BRAKE ASSY, MAIN
3	X-3668-706-0	o	BASE ASSY, S TENSION REGULATOR
4	X-3668-707-0	s	BAND ASSY, S TENSION REGULATOR
5	X-3668-708-0	s	ARM(A)ASSY, S TENSION REGULATOR
6	X-3668-709-0	s	SHAFT (1) ASSY, ROLLER
7	X-3668-717-0	o	BASE ASSY, SEARCH
8	X-3668-725-0	o	ARM (C) ASSY, SKEW
9	X-3668-727-0	s	GUIDE ASS'Y, TAPE
10	X-3668-749-0	s	HOLDER ASSY, LINING
11	1-454-417-31	s	SOLENOID, PLUNGER
12	1-618-873-11	o	PRINTED CIRCUIT BOARD, RM-39
13	3-534-238-XX	s	SPRING, TENSION (23T)
14	3-535-369-XX	s	SPRING, TENSION (12T)
15	3-548-124-00	s	SPRING, TENSION
16	3-668-787-02		ARM, S DETECTION
17	3-668-794-00	o	ARM (A), SKEW
18	3-668-795-00	s	SPRING
19	3-668-797-00	o	ARM, SKEW LOCK
20	3-668-804-00	s	LINK, DETECTION TENSION
21	3-668-808-00	s	ARM, FWD, SEARCH
22	3-668-827-00	o	SHAFT (S), REEL
23	3-668-835-00	s	ARM (B), SKEW
24	3-668-874-00	s	FLANGE (1), LOWER
25	3-668-936-00	s	ARM (B), S TENSION REGULATOR
26	3-668-937-00	s	CLAW, SKEW LOCK
27	3-668-939-00	o	ARM, BAND LOCK
28	3-668-966-00	s	SPRING
29	3-668-970-00	o	ARM, BRAKE
30	3-668-971-00	o	ARM, BRAKE RELEASE
31	3-672-743-01	o	BRACKET, MOTOR
32	3-672-744-01	s	PULLEY (R), MOTOR
33	3-701-438-01	s	WASHER, POLY 2.5MM DIA., 0.25T
34	3-701-444-01	s	WASHER, POLY 6MM DIA., 0.13T
35	3-701-444-11	s	WASHER, POLY 6MM DIA., 0.25T
36	3-701-444-21	s	WASHER, POLY 6MM DIA., 0.50T
37	3-703-074-00	s	CAP 3, SHAFT
38	3-718-337-01	s	LEVER, SKEW
39	4-304-749-00	o	NUT, FLANGE
40	8-835-178-01	s	MOTOR, DC FN30-T26N1E

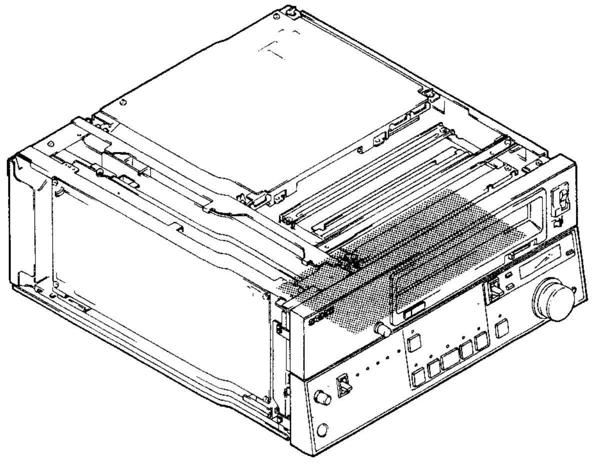
REEL CHASSIS (2), TAKE-UP SIDE

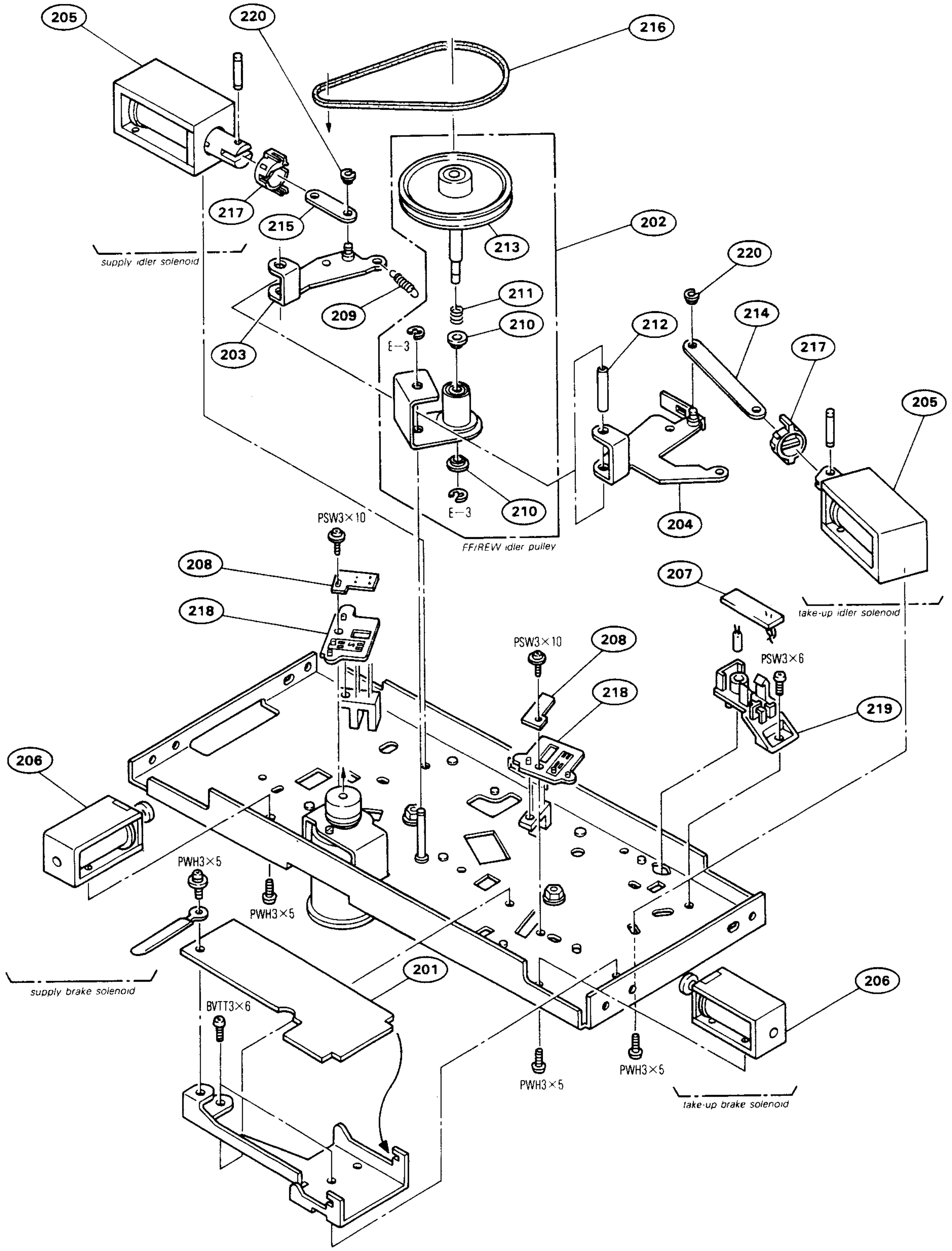



132
110
126
127
128
PSW3×6
102
130
135
PSW3×8
133
118
take-up reel table
FF/REW idler
SET SCREW3×3 (DOUBLE POINT)
104
125
119
117
SET SCREW3×3 (DOUBLE POINT)
103
E-2.3
123
108
114
122
124
113
take-up main brake
134
take-up tension regulator arm
PSW3×20
109
107
126
127
128
111
121
116
120
131
115
129
106
PSW3×5
105
R brake
BVTT3×6
112
101
PWH3×6

No.	Part No.	SP	Description
101	A-6725-569-A	o	MOUNTED CIRCUIT BOARD, PD-40
102	A-6739-016-C	s	TABLE ASS'Y, REEL
103	A-6741-038-B	s	BRAKE ASS'Y, MAIN
104	X-3646-026-0	s	IDLER ASS'Y, FF
105	X-3668-705-0	o	BASE ASS'Y, R BRAKE
106	X-3668-737-0	s	BRAKE ASS'Y, R
107	X-3668-738-0	s	ARM ASS'Y, T TENSION REGULATOR
108	X-3668-749-0	s	HOLDER ASS'Y, LINING
109	1-618-599-11	o	PRINTED CIRCUIT BOARD, SE-46
110	1-622-260-11	o	PRINTED CIRCUIT BOARD, PTC-30
111	1-806-232-21	s	DETECTOR MB-1102/S.N
112	2-382-416-01	o	SUPPORT, PC
113	3-535-369-XX	s	SPRING, TENSION (12T)
114	3-548-124-00	s	SPRING, TENSION
115	3-549-861-00	s	SPRING, TENSION
116	3-642-427-00	s	SPRING, TENSION
117	3-668-031-00	o	RETAINER (UPPER), CASSETTE
118	3-668-766-00	o	SHAFT (T), REEL
119	3-668-780-00	o	CUSHION, IDLER
120	3-668-788-00	s	ART, T DETECTION
121	3-668-789-00	o	HOLDER, BRIDGE, PHOTO
122	3-668-966-00	s	SPRING
123	3-668-970-00	o	ARM, BRAKE
124	3-668-971-00	o	ARM, BRAKE RELEASE
125	3-701-441-21	s	WASHER, POLY 4MM DIA., 0.50T
126	3-701-444-01	s	WASHER, POLY 6MM DIA., 0.13T
127	3-701-444-11	s	WASHER, POLY 6MM DIA., 0.25T
128	3-701-444-21	s	WASHER, POLY 6MM DIA., 0.50T
129	3-703-074-00	s	CAP 3, SHAFT
130	3-718-307-01	s	ACTUATOR, TRC
131	3-718-326-01	o	STOPPER (SP)
132	3-718-342-01	o	TRC-BOX (UPPER)
133	3-718-343-01	o	TRC-BOX (LOWER)
134	4-304-749-00	o	NUT, FLANGE
135	4-858-779-00	s	SPRING, COMPRESSION

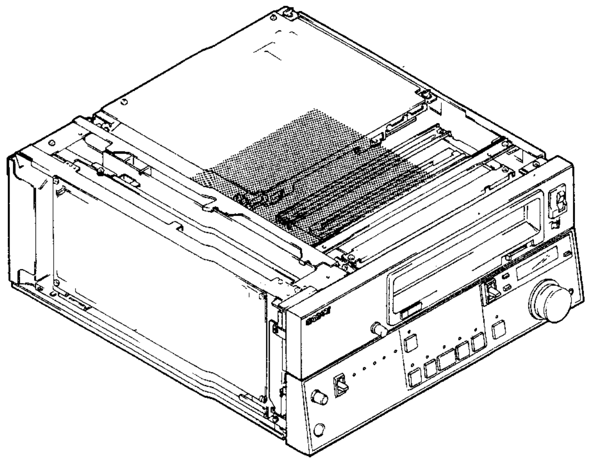
REEL CHASSIS (3), BACK SIDE

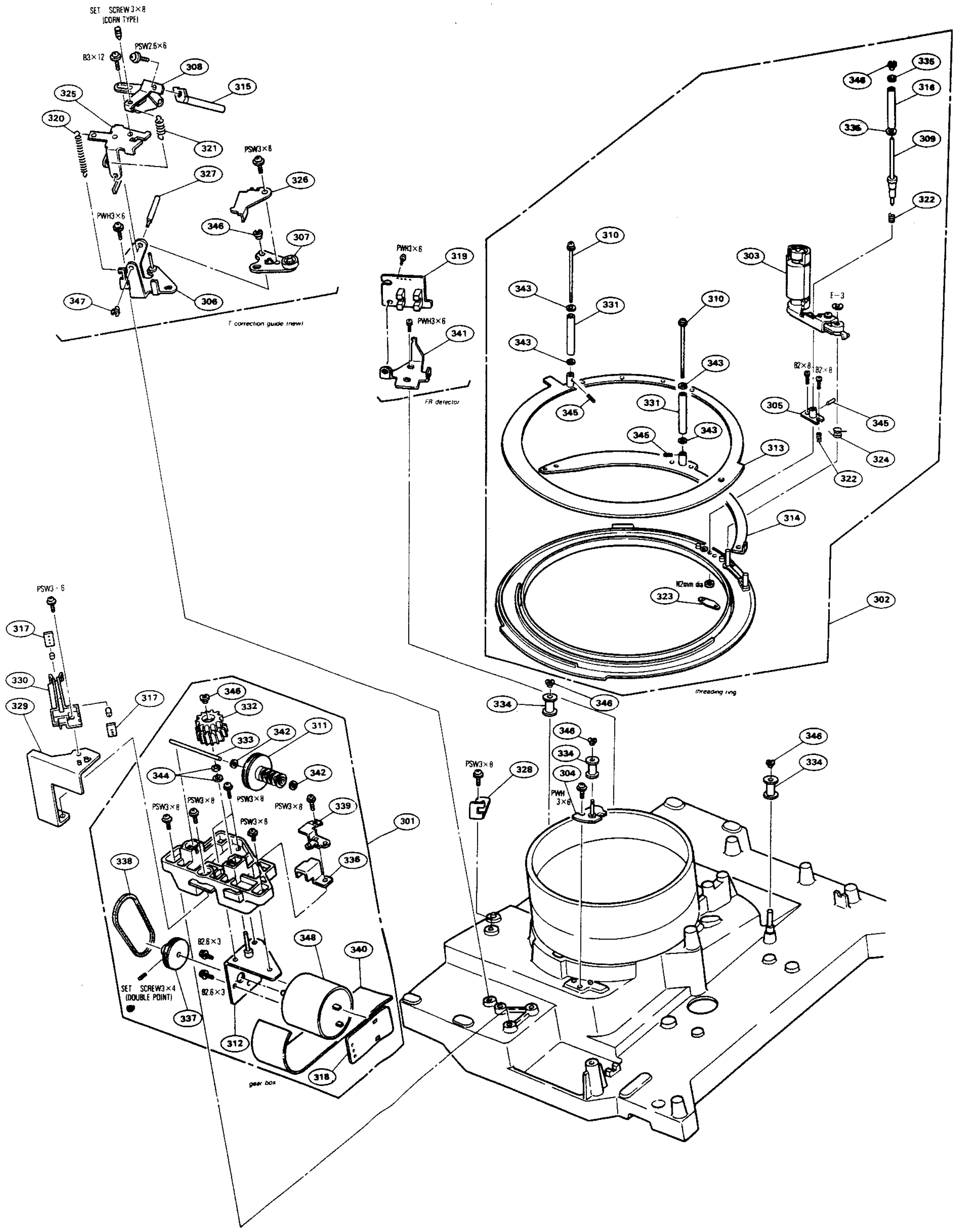



205
220
216
217
215
213
202
220
211
210
209
212
214
217
203
E-3
205
supply idler solenoid
E-3
210
204
FF/REW idler pulley
PSW3×10
208
218
207
take-up idler solenoid
PSW3×10
208
PSW3×6
218
219
206
PWH3×5
PWH3×5
supply brake solenoid
201
206
BVTT3×6
PWH3×5
PWH3×5
take-up brake solenoid

No.	Part No.	SP	Description
201	A-6725-570-A	o	MOUNTED CIRCUIT BOARD, PD-41
202	A-6740-069-B	s	PULLEY BLOCK, ASS'Y, IDLER
203	X-3668-703-0	o	LEVER ASS'Y, S
204	X-3668-704-0	o	LEVER ASS'Y, T
205	1-454-415-11	s	SOLENOID, PLUNGER
206	1-454-417-31	s	SOLENOID, PLUNGER
207	1-618-597-11	o	PRINTED CIRCUIT BOARD, TG-22
208	1-622-218-11	o	PRINTED CIRCUIT BOARD, PTC-35
209	3-437-452-00	s	SPRING, TENSION
210	3-650-512-00	s	COLLAR, (A)
211	3-651-572-00	s	SPRING, COMPRESSION
212	3-668-048-11	o	SPACER (DIA. 4x20)
213	3-668-772-00	s	SHAFT, IDLER PULLEY
214	3-668-781-00	o	JOINT, T
215	3-668-782-00	o	JOINT, S
216	3-668-785-00	s	BELT (67x2)
217	3-668-826-00	s	RETAINER, PIN, SOLENOID
218	3-668-828-02	o	BRACKET, PS
219	3-672-752-01	o	HOLDER, LED
220	3-703-074-00	s	CAP 3, SHAFT

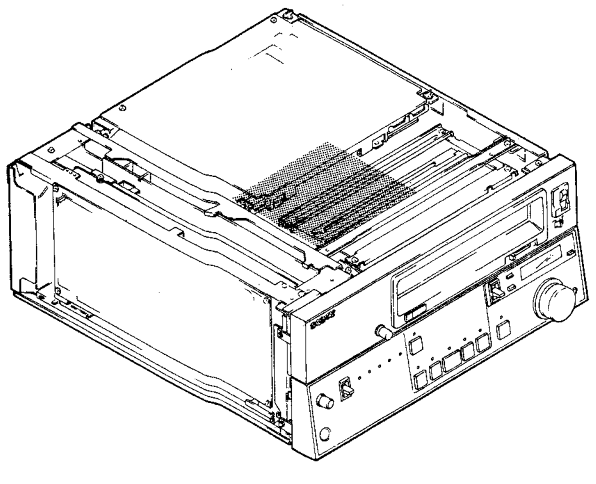
THREADING RIN G BLOCK

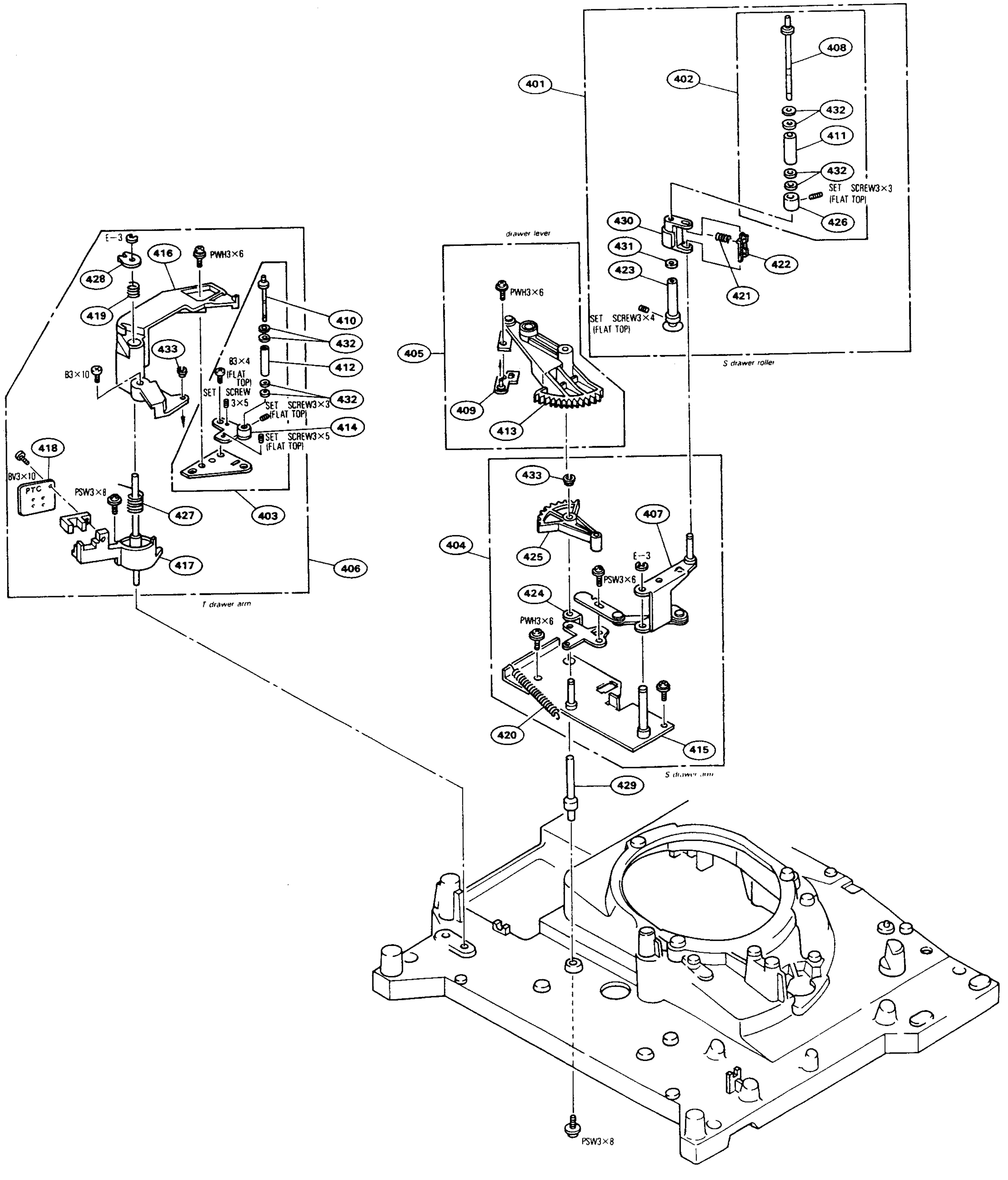



SET SCREW 3×8 (CORN TYPE)
PSW2.6×6
B3×12
308
315
325
320
321
PSW3×8
327
326
PWH3×6
346
307
347
306
T correction guide (new)
PWH3×6
319
PWH3×6
341
FR detector
348
335
316
336
309
322
310
303
E-3
343
331
310
343
343
B2×8
B2×8
305
345
331
346
343
345
313
324
322
314
f2mm dia
323
302
threading ring
PSW3×5
317
330
329
317
346
332
333
342
311
344
342
PSW3×8
PSW3×8
PSW3×8
PSW3×8
339
PSW3×8
301
338
336
B2.6×3
348
340
SET SCREW3×4 (DOUBLE POINT)
B2.6×3
337
312
gear box
318
334
346
PSW3×8
328
346
334
304
PWH 3×8
346
334

No.	Part No.	SP	Description
301	A-6750-219-A	s	BOX BLOCK ASS'Y, GEAR
302	A-6750-220-A	s	RING BLOCK ASS'Y, MAIN
303	A-6750-226-A	s	PINCH ROLLER BLOCK ASS'Y
304	X-3668-719-0	o	ROLLER ASS'Y, RING
305	X-3668-720-0	o	BASE ASS'Y, ROLLER, PRECEDING
306	X-3668-721-0	o	CHASSIS ASS'Y, GUIDE
307	X-3668-722-0	s	LOCKER ASS'Y, FR
308	X-3668-723-2	o	ARM ASS'Y, GUIDE, T CORRECTION
309	X-3668-724-3	s	SHAFT ASS'Y, ROLLER, PRECEDING
310	X-3668-733-0	s	SHAFT ASS'Y, SR GUIDE
311	X-3668-743-0	s	PULLEY ASS'Y, WORM
312	X-3672-704-1	o	BRACKET ASS'Y, MOTOR
313	X-3672-710-1	o	RING (UPPER) ASS'Y, SUB
314	X-3672-711-1	o	RING (LOWER) ASS'Y, SUB
315	X-3672-718-2	s	SHAFT ASS'Y, GUIDE
316	X-3718-303-1	s	GUIDE ASS'Y, (T), TAPE
317	1-603-737-00	o	PRINTED CIRCUIT BOARD, PH-5
318	1-618-600-11	o	PRINTED CIRCUIT BOARD, LM-13
319	1-622-258-11	o	PRINTED CIRCUIT BOARD, PTC-33
320	3-143-067-00	s	SPRING, TENSION
321	3-437-289-00	s	SPRING, TENSION
322	3-634-196-00	s	SPRING
323	3-668-743-00	o	NUT, PLATE, ROLLER, PRECEDING
324	3-668-745-00	s	SPRING
325	3-668-749-02	o	ARM (A), GUIDE, T CORRECTION
326	3-668-753-00	o	PLATE, ADJUSTMENT, FR LOCKER
327	3-668-754-00	o	SHAFT, GUIDE ARM, T CORRECTION
328	3-668-755-00	o	PLATE, STOPPER SR
329	3-668-900-00	o	BRACKET, T SENSOR
330	3-668-901-00	s	HOLDER, T PHOTO
331	3-668-919-00	s	ROLLER, SR GUIDE
332	3-668-947-00	s	PINION, L
333	3-668-948-00	o	SHAFT WORM
334	3-668-963-00	s	ROLLER, RING
335	3-669-926-01	s	WASHER (3), THRUST
336	3-669-960-00	o	RETAINER, SHAFT
337	3-672-736-01	s	PULLEY, LM
338	3-672-737-01	s	BELT SQUARE
339	3-672-738-01	o	PLATE GROUND SLED
340	3-672-739-01	o	BELT, LM SHIELD
341	3-672-790-01	o	BRAKET, FR DETECTION
342	3-701-437-21	s	WASHER, POLY 2MM DIA., 0.50T
343	3-701-438-11	s	WASHER, POLY 2.5MM DIA., 0.25T
344	3-701-439-21	s	WASHER, POLY 3MM DIA., 0.50T
345	3-701-505-00	s	SET SCREW, DUBLE POINT 3x3
346	3-703-074-00	s	CAP 3, SHAFT
347	3-703-075-00	s	CAP 2, SHAFT
348	1-541-376-11	s	MOTOR, DC (DNR-4700A)

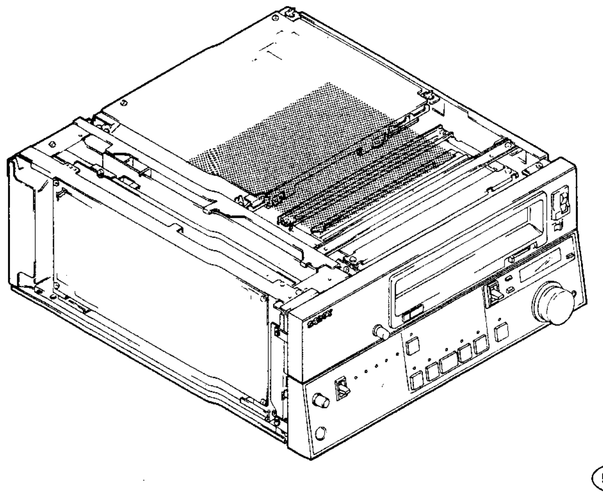
THREADING ARM

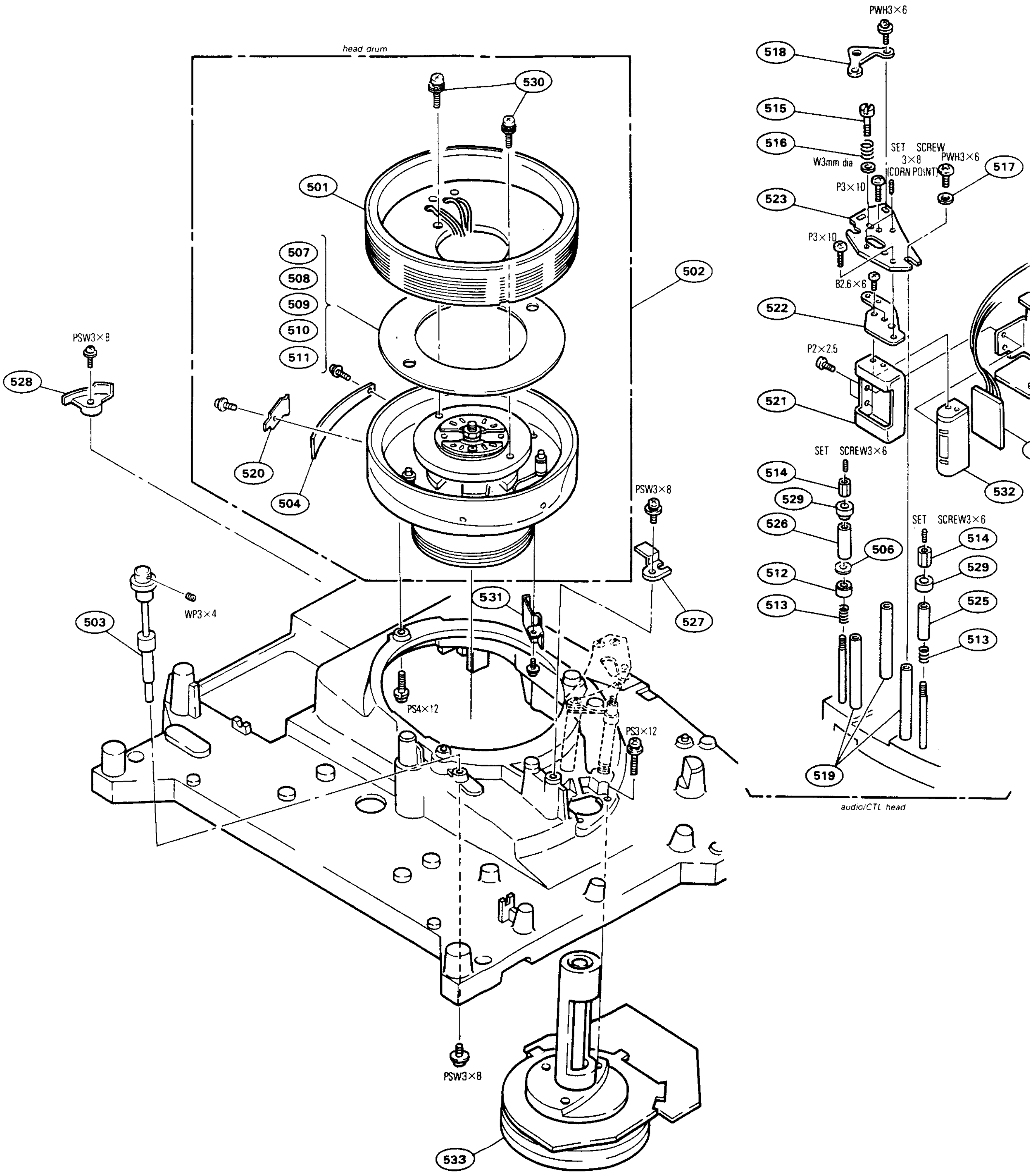



E-3
416
PWH3×6
428
419
410
432
412
432
414
433
B3×4
(FLAT TOP)
SET SCREW 3×5
SET SCREW3×3 (FLAT TOP)
SET SCREW3×5 (FLAT TOP)
B3×10
418
BV3×10
PTC
PSW3×8
427
403
417
406
T drawer arm
401
402
408
432
411
432
SET SCREW3×3 (FLAT TOP)
426
430
431
423
422
421
SET SCREW3×4 (FLAT TOP)
S drawer roller
drawer lever
PWH3×6
405
409
413
433
407
425
E-3
PSW3×6
404
424
PWH3×6
420
415
S drawer arm
429
PSW3×8

No.	Part No.	SP	Description
401	A-6746-021-C	s	ROLLER BLOCK ASS'Y, S DRAWER
402	A-6746-034-A	s	ROLLER BLOCK ASS'Y, (2) DRAWER
403	A-6746-045-A	s	ROLLER BLOCK ASS'Y, T GUIDE
404	A-6750-201-A	o	ARM BLOCK ASS'Y, S DRAWER
405	A-6750-202-A	o	LEVER BLOCK ASS'Y, DRAWER
406	A-6750-218-A	o	ARM BLOCK ASS'Y, T DRAWER
407	X-3668-711-0	o	ARM ASS'Y, S DRAWER
408	X-3668-712-3	s	SHAFT (2) ASS'Y, ROLLER
409	X-3668-713-0	o	LINK (B) ASS'Y, DRIVING
410	X-3668-716-0	s	SHAFT (3) ASS'Y, ROLLER
411	X-3668-718-0	s	GUIDE ASS'Y, TAPE
412	X-3668-727-0	o	GUIDE ASS'Y, TAPE
413	X-3668-729-0	s	LEVER ASS'Y, DRAWER
414	X-3672-705-1	o	PLATE ASS'Y, GUIDE, T
415	X-3672-706-1	o	BASE ASS'Y, S DRAWER ARM
416	X-3672-708-1	o	ARM ASS'Y, T DRAWER
417	X-3718-305-1	o	RITAINER ASS'Y, ARM, T DRAWER
418	1-622-259-11	o	PRINTED CIRCUIT BOARD, PTC-34
419	3-534-854-00	s	SPRING, COMPRESSION
420	3-540-506-00	s	SPRING, TENSION
421	3-644-718-00	s	SPRING, COMPRESSION
422	3-668-718-00	s	RETAINER, SPRING, S DRAWER
423	3-668-719-00	s	HOLDER (L), S GUIDE
424	3-668-720-00	o	LIMITER, S DRAWER
425	3-668-721-00	s	ARM, S DRIVING
426	3-668-724-00	o	FLANGE (2), LOWER
427	3-668-734-00	o	SPRING
428	3-668-735-00	s	RETAINER, SPRING
429	3-668-760-00	s	SHAFT, DRAWER LEVER
430	3-668-833-00	s	HOLDER (M), GUIDE, S
431	3-669-946-00	s	RING (P4), O
432	3-701-438-01	s	WASHER, POLY 2.5MM DIA., 0.13T
433	3-703-074-00	s	CAP 3, SHAFT

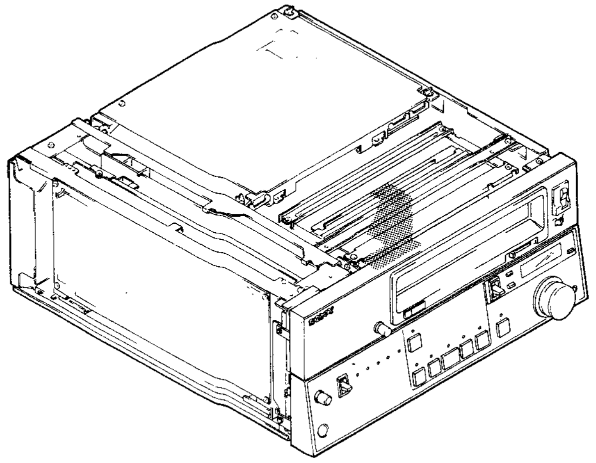
DRUM AND CAPSTAN BLOCKS

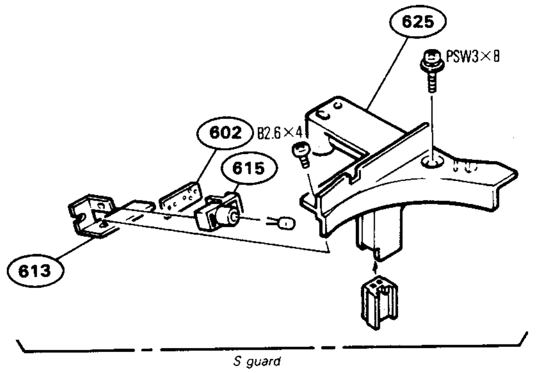



head drum
530
501
507
508
509
510
511
502
520
504
PSW3×8
528
PSW3×8
527
531
503
WP3×4
PS4×12
PS3×12
PSW3×8
533
PWH3×6
518
515
516
W3mm dia
SET SCREW 3×8 (CORN POINT)
PWH3×6
517
523
P3×10
P3×10
B2.6×6
522
524
P2×2.5
521
505
SET SCREW3×6
514
529
526
532
SET SCREW3×6
514
506
529
512
525
513
513
519
audio/CTL head

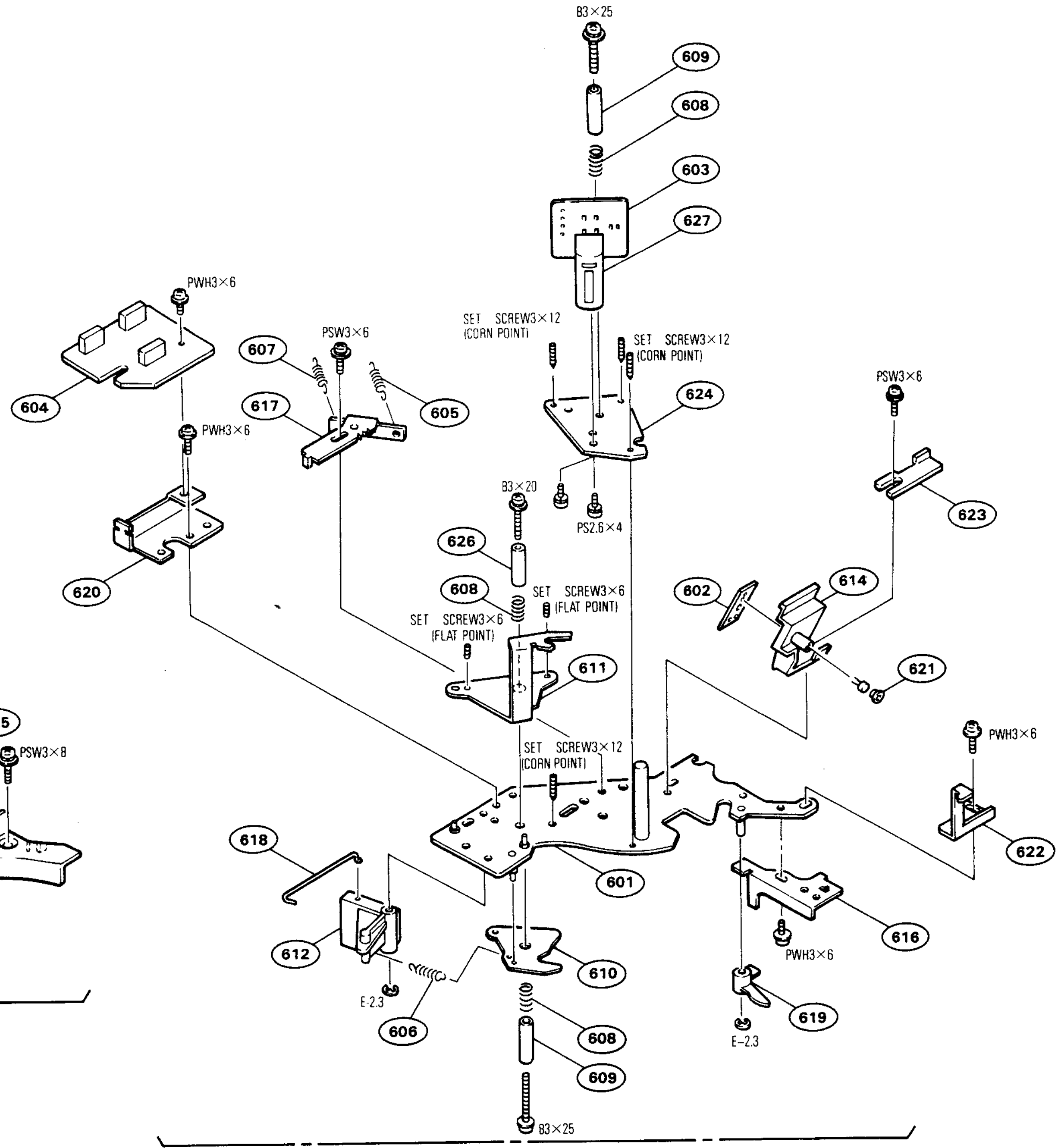
No.	Part No.	SP	Description
501	A-6709-601-A	s	UPPER DRUM ASS'Y, DUR-42-R
502	A-6709-606-A	s	HEAD DRUM ASS'Y, DUH-42A-R
503	A-6746-052-A	s	ROLLER ASS'Y, GUIDE, TAPE
504	1-586-633-00	s	DETECTOR, DEW
505	1-615-924-11	o	PRINTED CIRCUIT BOARD, DUS-92
506	3-534-329-11	s	WASHER, TAPE GUIDE
507	3-630-029-01	s	SPACER, FLANGE (0.01T)
508	3-630-029-11	s	SPACER, FLANGE (0.02T)
509	3-630-029-21	s	SPACER, FLANGE (0.05T)
510	3-630-029-31	s	SPACER, FLANGE (0.1T)
511	3-630-029-41	s	SPACER, FLANGE (0.03T)
512	3-641-612-00	s	GUIDE, TAPE
513	3-641-615-00	s	SPRING, COMPRESSION
514	3-641-616-00	s	NUT, TAPE GUIDE ADJUSTMENT
515	3-641-621-00	s	SCREW, HEAD ADJUSTMENT
516	3-641-622-00	s	SPRING, COMPRESSION
517	3-645-076-00	o	WASHER, M-REEL S
518	3-647-815-00	o	PLATE, ADJUSTMENT, CTL HEAD
519	3-647-816-00	o	POLE, SUPPORT, CTL BRACKET
520	3-655-631-00	o	TERMINAL, GRUND
521	3-655-675-02	o	CASE (F), AU
522	3-655-676-01	o	BRACKET (A), CTL HEAD
523	3-655-677-01	o	BRACKET (B), CTL HEAD
524	3-655-678-03	o	CASE (B), AU
525	3-672-730-01	s	TG-3
526	3-672-731-01	s	TG-4
527	3-672-762-01	o	PIN, DRUM
528	3-672-763-01	o	CAM, P OFFSET PREVENTION
529	3-688-807-01	s	FRANGE, TAPE GUIDE
530	3-703-467-01	s	SCREW
531	3-710-826-01	o	SHIELD, CN
532	8-825-578-41	s	HEAD, AUDIO PS264-5803
533	8-835-258-01	s	MOTOR, DC BHF-1915B

ERASE HEAD BASE




625
PSW3×8
602
B2.6×4
615
613

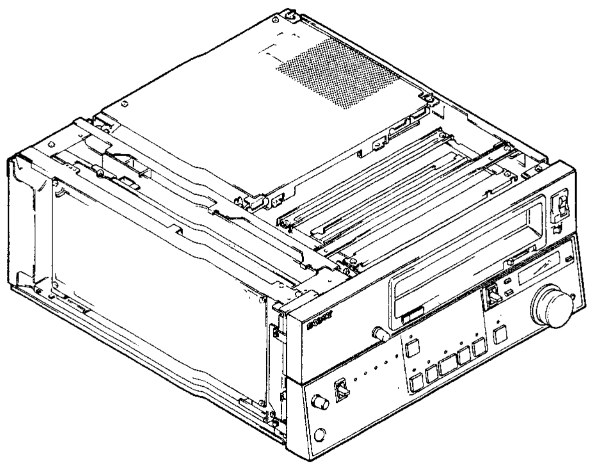
S guard

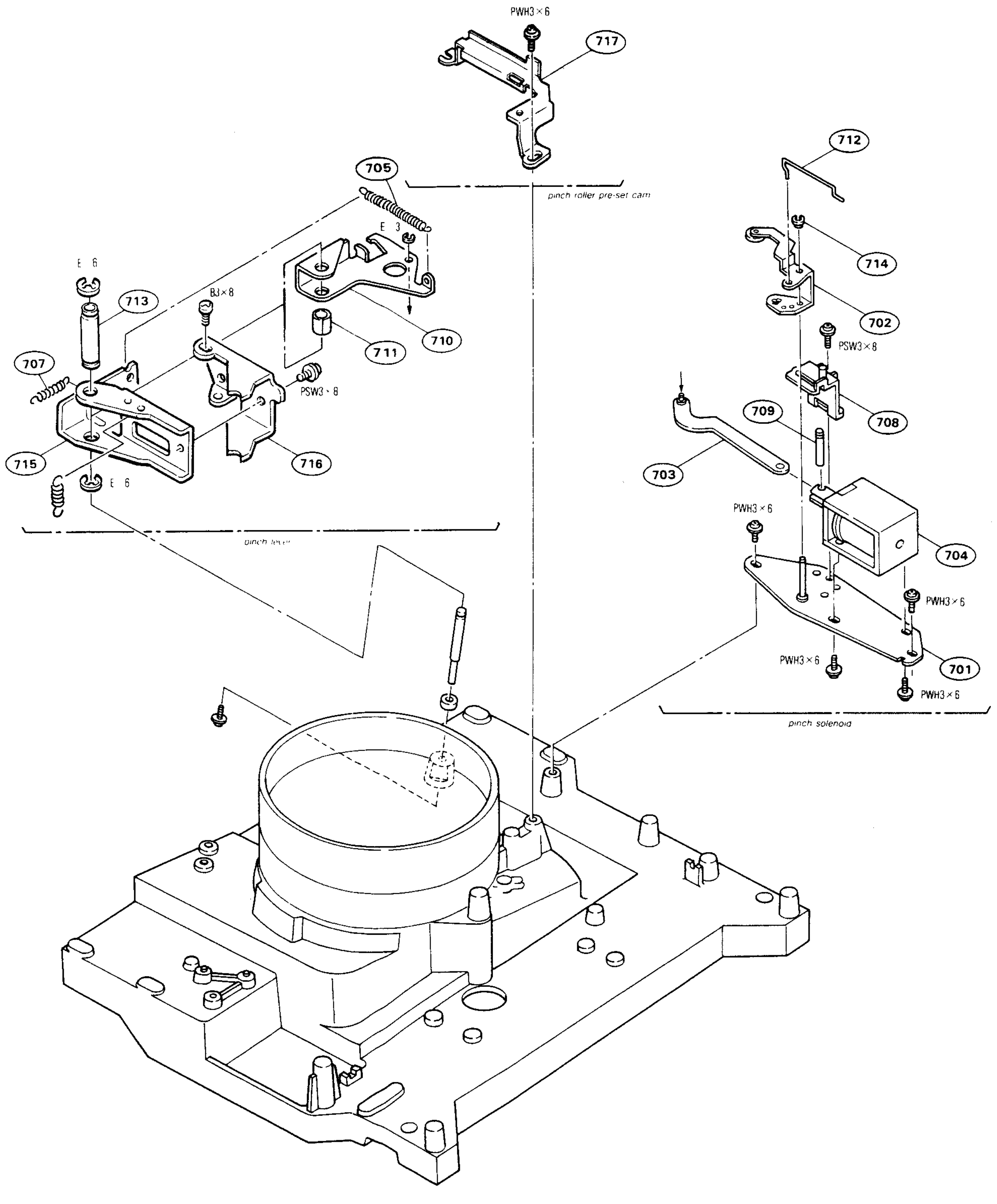

B3×25
609
608
603
627
PWH3×6
604
PSW3×6
607
617
605
SET SCREW3×12
(CORN POINT)
SET SCREW3×12
(CORN POINT)
624
PSW3×6
PWH3×6
620
B3×20
PS2.6×4
626
623
608
SET SCREW3×6
(FLAT POINT)
SET SCREW3×6
(FLAT POINT)
611
602
614
621
SET SCREW3×12
(CORN POINT)
PWH3×6
622
618
601
612
616
PWH3×6
610
E-2.3
606
608
619
E-2.3
609
B3×25

erase head base

No.	Part No.	SP	Description
601	X-3668-728-0	o	DECK ASS'Y, E HEAD
602	1-603-737-00	o	PRINTED CIRCUIT BOARD, PH-5
603	1-622-223-11	o	PRINTED CIRCUIT BOARD, EC-28
604	1-622-261-11	o	PRINTED CIRCUIT BOARD, DUS-147
605	3-534-238-XX	s	SPRING, TENSION (23T)
606	3-535-531-00	s	SPRING, TENSION
607	3-538-102-00	s	SPRING, TENSION
608	3-637-335-00	s	SPRING, COMPRESSION (C)
609	3-657-086-00	o	SPACER (3x20)
610	3-668-705-00	s	HOLDER (LOWER), S
611	3-668-706-02	s	HOLDER (UPPER), S
612	3-668-708-00	o	ARM, DRIVING, CORRECTION GUIDE
613	3-668-809-02	o	BRACKET, HOLDER
614	3-668-832-02	o	HOLDER (S)
615	3-668-837-00	o	HOLDER, LED
616	3-668-859-00	o	STOPPER, RING
617	3-668-860-00	o	HOOK, SPRING, TENSION REGULATOR
618	3-668-884-03	o	JOINT, RESERVE PRESS
619	3-668-894-00	o	LEVER, RELEASE
620	3-668-962-00	o	BRACKET, AH PC BOARD
621	3-669-920-00	o	COVER, S PHOTO
622	3-669-963-00	o	SPRING, LEAF, GROUND
623	3-669-964-00	o	PLATE, GROUND
624	3-672-723-00	o	TABLE, HEAD, E
625	3-672-764-03	s	GUARD, S
626	4-855-006-11	s	SPACER (3x14)
627	8-825-514-20	s	HEAD, CTL (PP170-58)

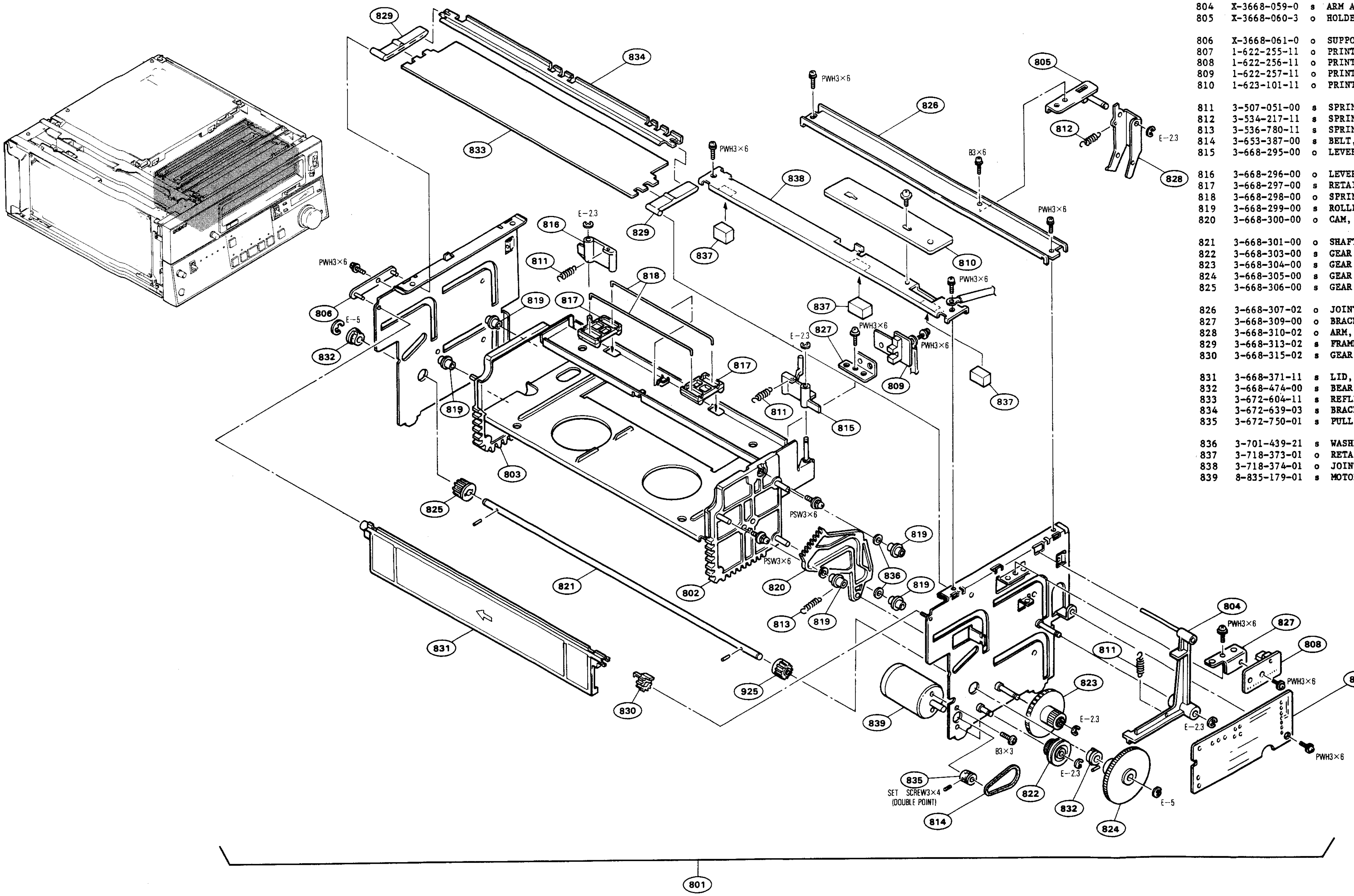
PINCH LEVER AND PINCH SOLENOID BLOCKS




PWH3 × 6
717
pinch roller pre-set cam
705
E 3
710
711
E 6
713
BJ × 8
707
PSW3 × 8
715
716
E 6
pinch lever
712
714
702
PSW3 × 8
708
709
703
PWH3 × 6
704
PWH3 × 6
PWH3 × 6
701
PWH3 × 6
pinch solenoid

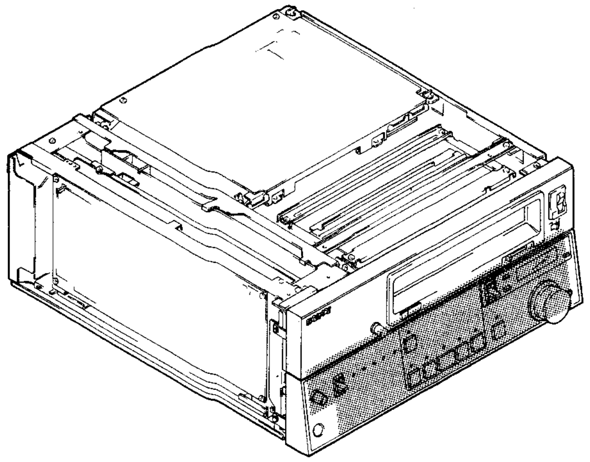
No.	Part No.	SP	Description
701	X-3668-734-0	o	BASE ASS'Y, PINCH PRESS
702	X-3668-735-3	s	LEVER ASS'Y, RESERVE PRESS
703	X-3668-736-0	o	JOINT ASS'Y
704	1-454-416-31	s	SOLENOID, PLUNGER
705	3-610-265-02	s	SPRING
707	3-645-392-00	s	SPRING, TENSION
708	3-668-863-00	s	GUIDE, ARBOR
709	3-668-864-00	s	PIN, SOLENOID
710	3-668-865-00	o	LEVER (B), PINCH PRESS
711	3-668-867-00	o	SPACER (8x9)
712	3-668-884-03	o	JOINT, RESERVE PRESS
713	3-668-896-00	o	SLEEVE, PRESS LEVER, PINCH
714	3-703-074-00	s	CAP 3, SHAFT
715	3-718-364-01	o	LEVER (A), PINCH PRESS
716	3-718-365-01	o	PLATE, PRESS, PINCH
717	3-718-727-01	o	DECK, RESERVE PRESS

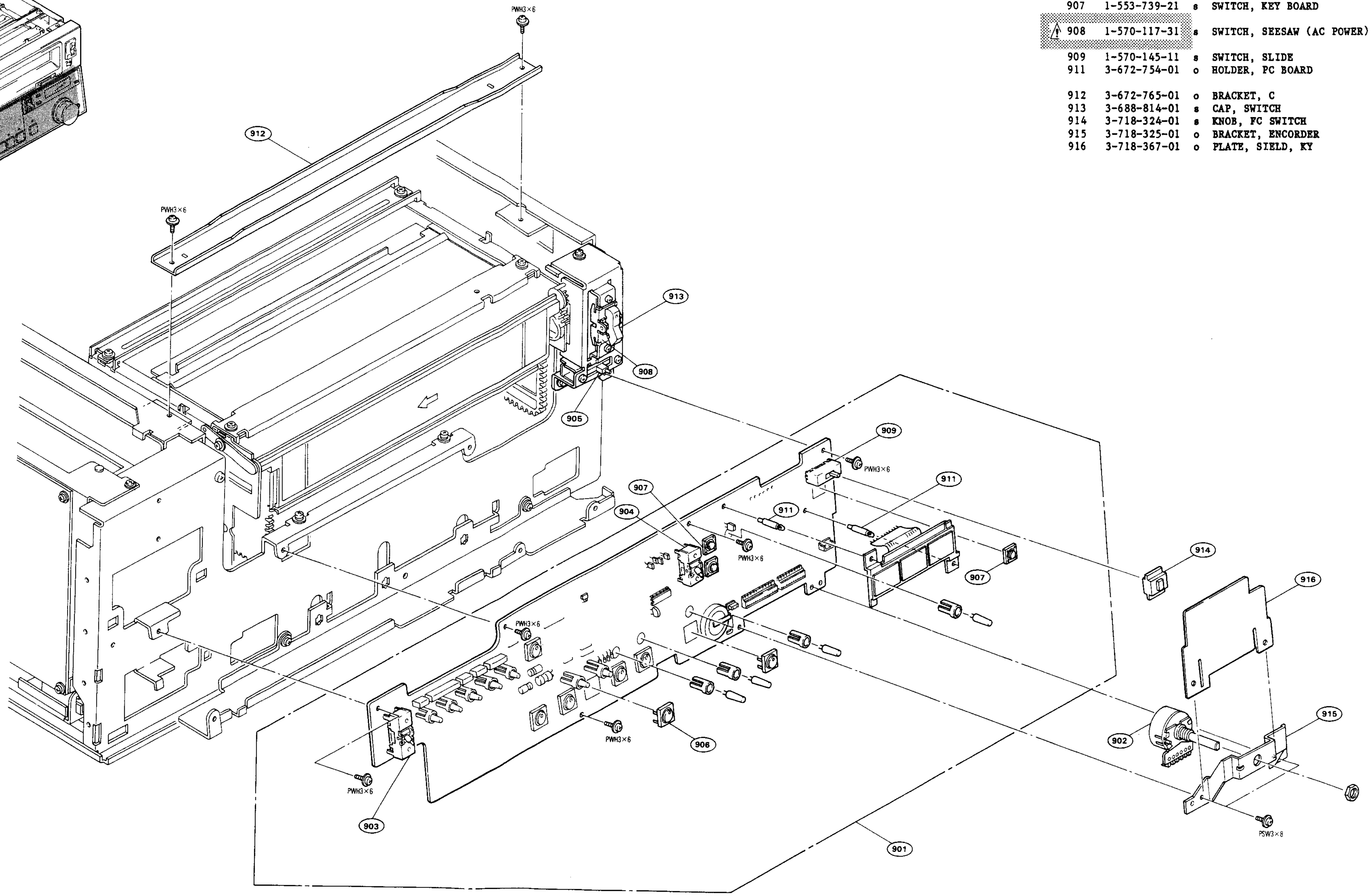
CASSETTE-UP COMPARTMENT BLOCK


829
834
833
826
805
812
828
838
816
811
818
819
817
806
832
803
825
821
802
820
836
813
831
830
925
839
835
814
822
824
823
804
827
808
807
810
837
809
815
801
PWH3×6
E-2.3
B3×6
E-5
PSW3×6
B3×3
SET SCREW3×4
(DOUBLE POINT)

No.	Part No.	SP	Description
801	A-6751-367-A	s	CASSETTE-UP BLOCK ASS'Y
802	X-3668-057-0	s	RACK ASS'Y, CASSETTE COMPARTMENT
803	X-3668-058-0	s	RACK ASS'Y, CASSETTE COMPARTMENT
804	X-3668-059-0	s	ARM ASS'Y, SWITCH, DOWN
805	X-3668-060-3	o	HOLDER ASS'Y, ARM
806	X-3668-061-0	o	SUPPORT ASS'Y, LID
807	1-622-255-11	o	PRINTED CIRCUIT BOARD, CC-31
808	1-622-256-11	o	PRINTED CIRCUIT BOARD, CC-32
809	1-622-257-11	o	PRINTED CIRCUIT BOARD, CC-33
810	1-623-101-11	o	PRINTED CIRCUIT BOARD, LP-41
811	3-507-051-00	s	SPRING, TENSION
812	3-534-217-11	s	SPRING, TENSION
813	3-536-780-11	s	SPRING, TENSION
814	3-653-387-00	s	BELT, LM
815	3-668-295-00	o	LEVER (RIGHT), CASSETTE PUSH-OUT
816	3-668-296-00	o	LEVER (LEFT), CASSETTE PUSH-OUT
817	3-668-297-00	s	RETAINER, CASSETTE
818	3-668-298-00	o	SPRING
819	3-668-299-00	s	ROLLER, GUIDE
820	3-668-300-00	o	CAM, LID OPEN
821	3-668-301-00	o	SHAFT, DRIVING
822	3-668-303-00	s	GEAR (A)
823	3-668-304-00	s	GEAR (B)
824	3-668-305-00	s	GEAR (C)
825	3-668-306-00	s	GEAR (D)
826	3-668-307-02	o	JOINT (R), LEFT & RIGHT
827	3-668-309-00	o	BRACKET, SWITCH
828	3-668-310-02	o	ARM, LID OPEN
829	3-668-313-02	s	FRAME, SUPPORT, REFLECTOR
830	3-668-315-02	s	GEAR, LID
831	3-668-371-11	s	LID, CASSETTE
832	3-668-474-00	s	BEARING (6)
833	3-672-604-11	s	REFLECTOR
834	3-672-639-03	s	BRACKET, LAMP
835	3-672-750-01	s	PULLEY (C), MOTOR
836	3-701-439-21	s	WASHER, POLY 3MM DIA., 0.50T
837	3-718-373-01	o	RETAINER, LID
838	3-718-374-01	o	JOINT (F), LEFT & RIGHT
839	8-835-179-01	s	MOTOR, DC MCB2B15

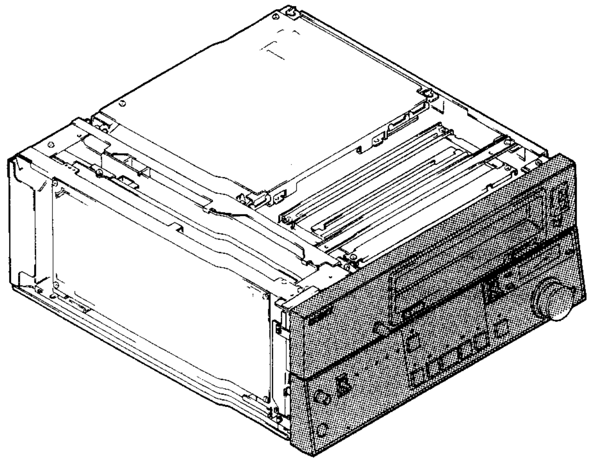
FUNCTION CONTROL

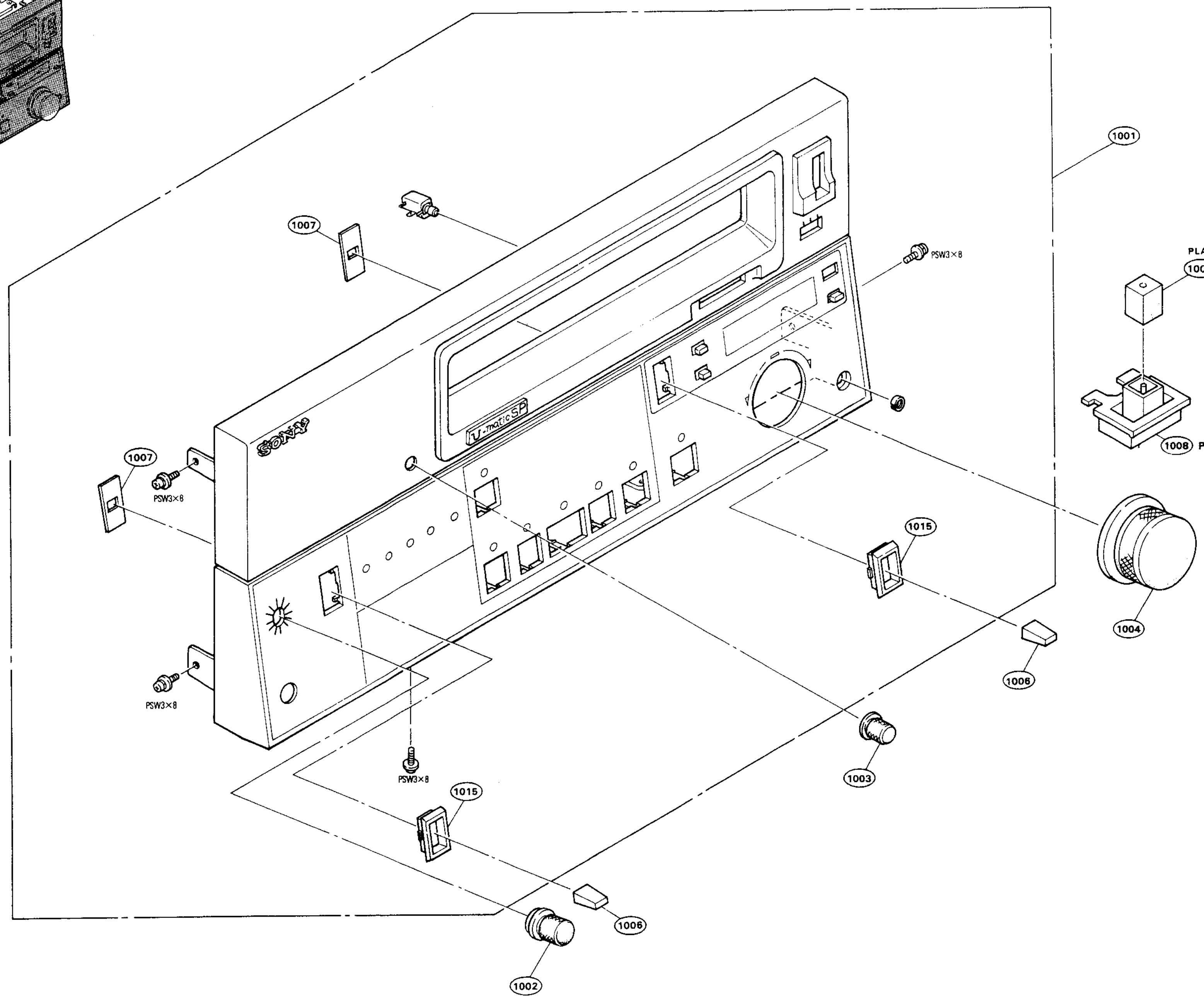


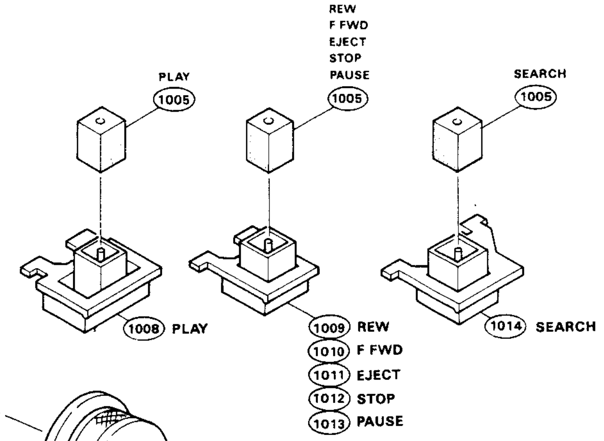

901
902
903
904
905
906
907
908
909
911
912
913
914
915
916
PWH3×6
PSW3×8

No.	Part No.	SP	Description
901	A-6717-465-A	o	MOUNTED CIRCUIT BOARD, KY-105E
902	1-464-801-12	s	ENCODER, ROTARY
903	1-516-298-00	s	SWITCH, LEVER SLIDE
904	1-516-995-00	s	SWITCH, LEVER SLIDE
905	1-552-271-00	s	SWITCH, SLIDE
906	1-552-539-00	s	SWITCH, KEY BOARD
907	1-553-739-21	s	SWITCH, KEY BOARD
⚠ 908	1-570-117-31	s	SWITCH, SEESAW (AC POWER)
909	1-570-145-11	s	SWITCH, SLIDE
911	3-672-754-01	o	HOLDER, PC BOARD
912	3-672-765-01	o	BRACKET, C
913	3-688-814-01	s	CAP, SWITCH
914	3-718-324-01	s	KNOB, FC SWITCH
915	3-718-325-01	o	BRACKET, ENCORDER
916	3-718-367-01	o	PLATE, SIELD, KY

FRONT PANEL BLOCK

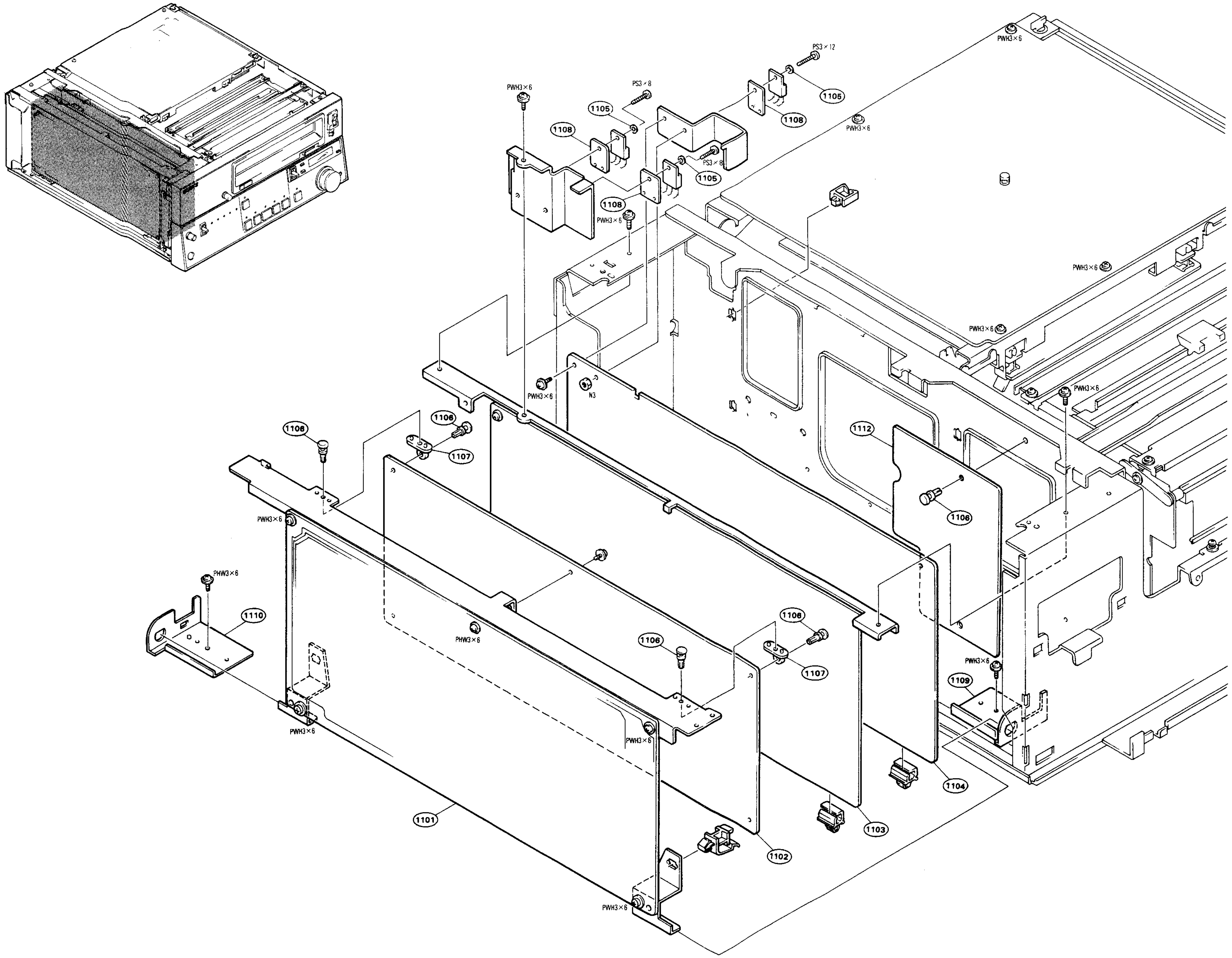



1001
1002
1003
1004
1006
1006
1007
1007
1015
1015
PSW3×8
PSW3×8
PSW3×8
PSW3×8


PLAY
1005
REW
F FWD
EJECT
STOP
PAUSE
1005
SEARCH
1005
1008 PLAY
1009 REW
1010 F FWD
1011 EJECT
1012 STOP
1013 PAUSE
1014 SEARCH

No.	Part No.	SP	Description
1001	A-6704-278-A	o	PANEL ASS'Y, FRONT
1002	X-2112-801-1	s	KNOB ASS'Y, VOL
1003	X-3672-707-1	s	KNOB ASS'Y, VOLUME
1004	X-3718-304-1	s	KNOB ASS'Y, DIAL
1005	2-284-744-00	o	CUSHION (B), KEY
1006	3-668-028-21	s	KNOB (SMALL), LEVER SWITCH
1007	3-669-909-31	o	PLATE, BLIND, LEVER SWITCH
1008	3-672-782-02	s	KEY TOP (A) "PLAY"
1009	3-672-783-02	s	KEY TOP (B) "REW"
1010	3-672-783-12	s	KEY TOP (B) "F FWD"
1011	3-672-783-32	s	KEY TOP (B) "EJECT"
1012	3-672-783-42	s	KEY TOP (B) "STOP"
1013	3-672-783-52	s	KEY TOP (B) "PAUSE"
1014	3-672-785-11	s	KEY TOP (D) "SEARCH"
1015	3-672-786-21	o	ESCUTCHEON (INNER), SLIDE SW

CHASSIS BLOCK (1), LEFT SIDE

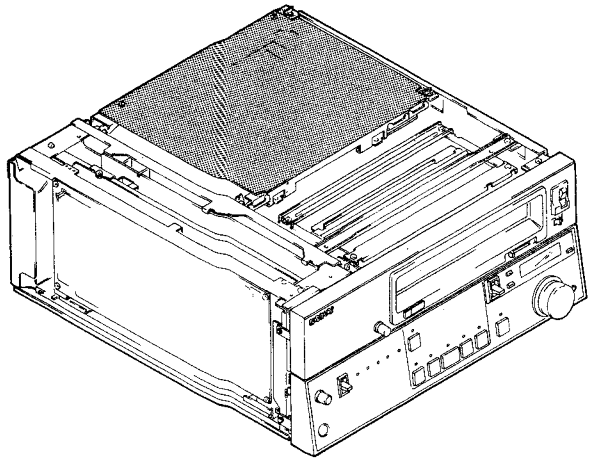

PWH3×6
PS3×12
1105
PS3×8
1105
1108
1108
PWH3×6
PS3×8
1105
1108
PWH3×6
PWH3×6
PWH3×6
PWH3×6
PWH3×6
N3
1106
1107
1106
1112
1106
PWH3×6
PWH3×6
1110
PWH3×6
1106
1106
1107
1109
PWH3×6
PWH3×6
1104
1103
1101
1102
PWH3×6

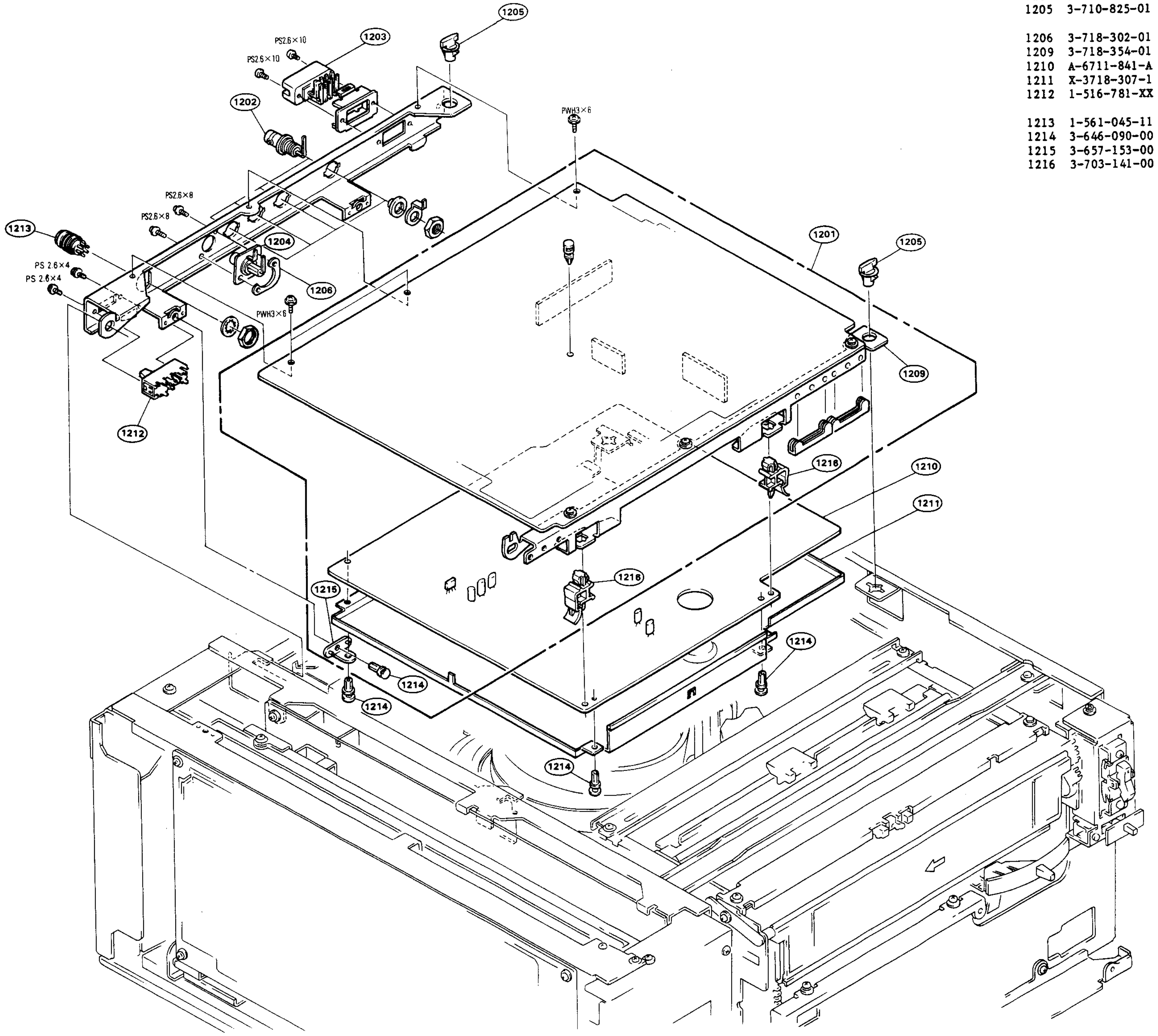
No.	Part No.	SP	Description
1101	A-6713-280-A	o	MOUNTED CIRCUIT BOARD, AU-82A
1102	A-6713-281-A	o	MOUNTED CIRCUIT BOARD, AU-89A
1103	A-6715-375-A	o	MOUNTED CIRCUIT BOARD, SV-93E
1104	A-6717-454-A	o	MOUNTED CIRCUIT BOARD, SY-106A
1105	2-371-561-00	s	BUSHING (P), INSULATING
1106	3-646-090-00	s	RIVET, NYLON
1107	3-657-153-00	o	HINGE
1108	3-703-037-00	s	INSULATOR, TO-220
1109	3-718-303-01	o	PLATE (A), HINGE, AU
1110	3-718-304-01	o	PLATE (B), HINGE, AU
1112	3-718-370-01	o	INSULATOR, SY

CHASSIS BLOCK (2)

CHASSIS BLOCK (2)

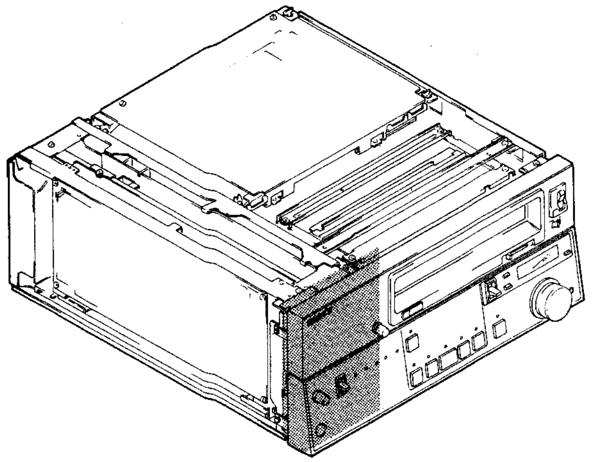
CHASSIS BLOCK (2), BACK SIDE

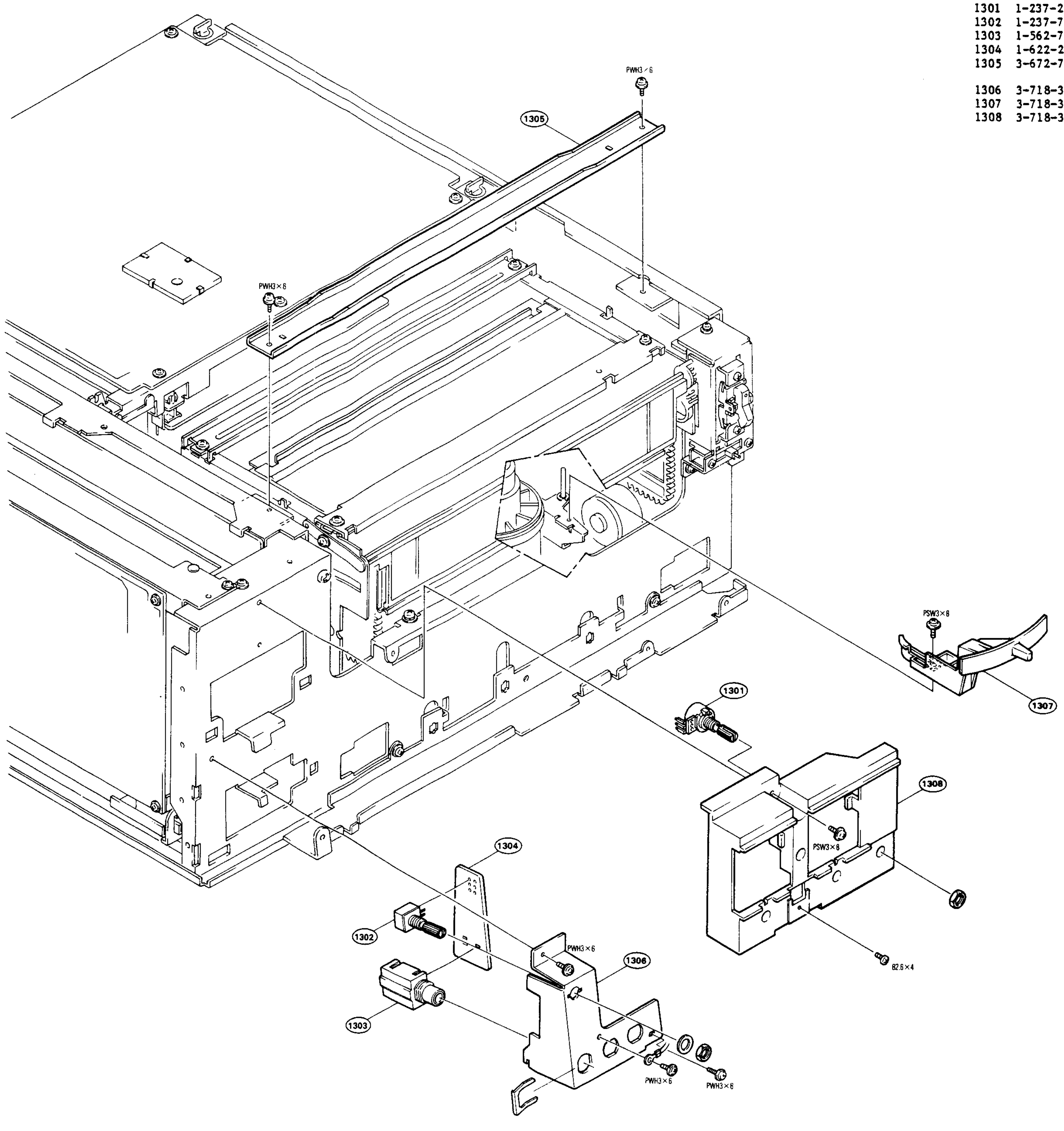



1205
PS2.6×10
PS2.6×10
1203
1202
PWH3×6
PS2.6×8
PS2.6×8
1213
1204
PS 2.6×4
PS 2.6×4
1206
PWH3×6
1201
1205
1209
1212
1216
1210
1211
1216
1215
1214
1214
1214
1214

No.	Part No.	SP	Description
1201	A-6711-839-A	o	MOUNTED CIRCUIT BOARD, VP-26
1202	1-563-354-11	s	CONNECTOR, BNC
1203	1-563-356-11	s	CONNECTOR, MULTI 8P
1204	1-563-989-11	s	JACK, PIN (RCA) 1P
1205	3-710-825-01	o	FASTENER, PLATE
1206	3-718-302-01	o	BRACKET, PIN JACK
1209	3-718-354-01	o	BRACKET, VR
1210	A-6711-841-A	o	MOUNTED CIRCUIT BOATD, CO-7A
1211	X-3718-307-1	o	PLATE BLOCK ASS'Y, SHIELD, VR
1212	1-516-781-XX	s	SLIDE SWITCH
1213	1-561-045-11	s	CONNECTOR, (RF)
1214	3-646-090-00	s	RIVET, NYLON
1215	3-657-153-00	o	HINGE
1216	3-703-141-00	o	HOLDER, PCB

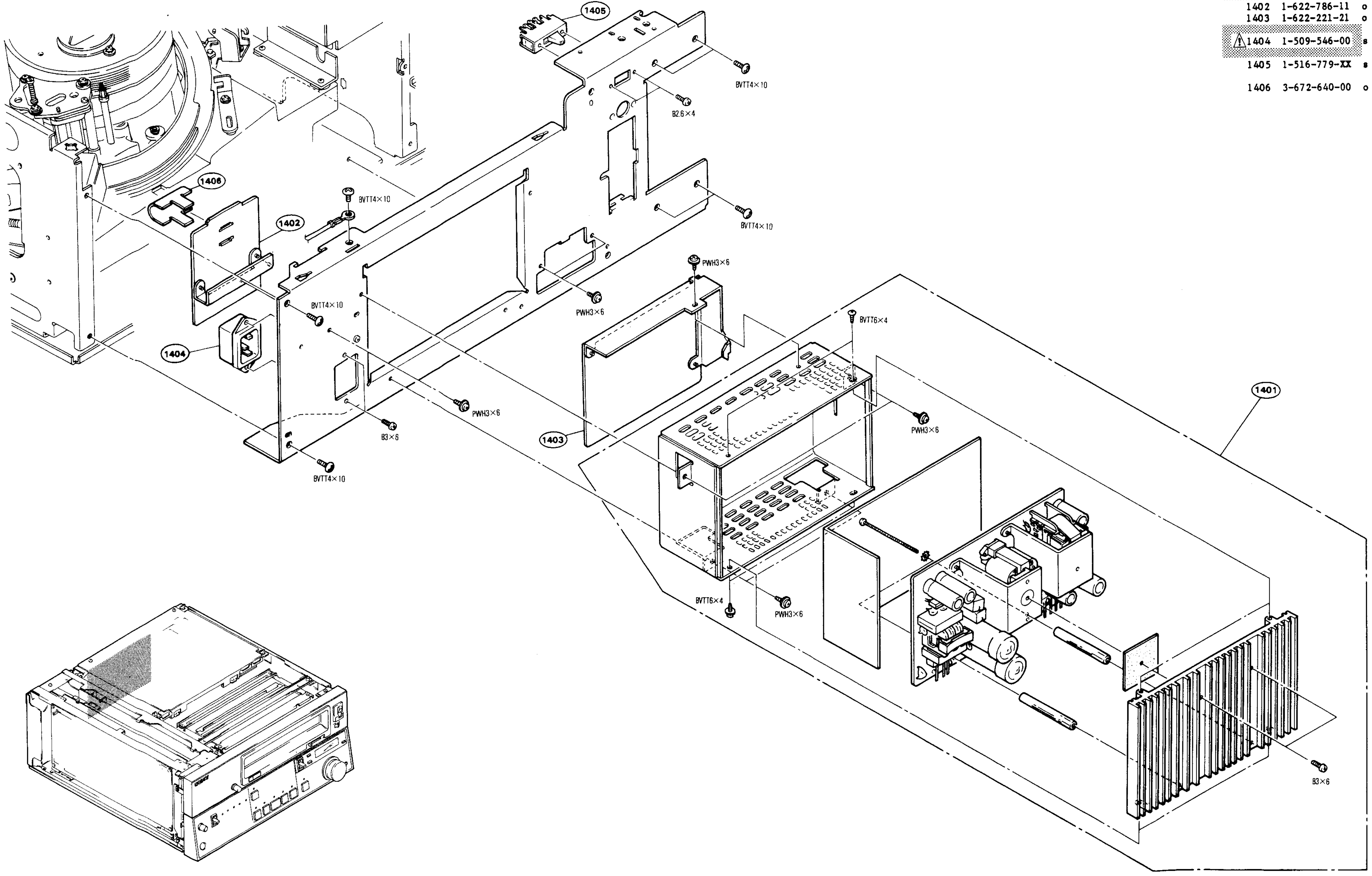
LEVEL CONTROL PANEL




PWH3×6
1305
PWH3×8
PSW3×8
1307
1301
1308
PSW3×8
B2.6×4
1304
1302
PWH3×6
1306
1303
PWH3×6
PWH3×6

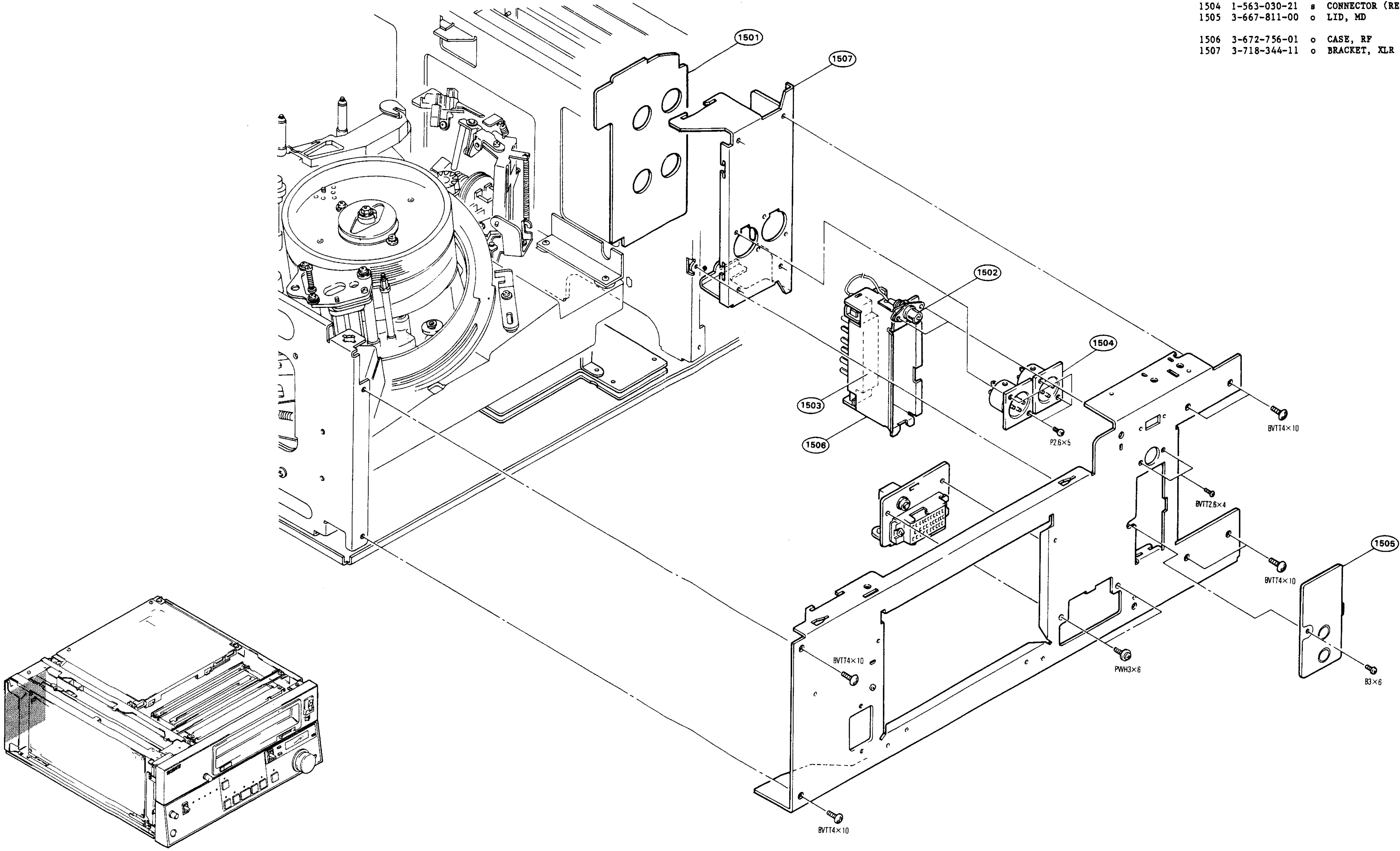
No.	Part No.	SP	Description
1301	1-237-215-11	s	RES, VAR CARBON 100K
1302	1-237-703-11	s	RES, VAR CARBON 2K/2K
1303	1-562-795-11	s	JACK, LARGE TYPE
1304	1-622-220-11	o	PRINTED CIRCUIT BOARD, HP-30
1305	3-672-765-01	o	BRACKET, C
1306	3-718-331-01	o	BRACKET, HEAD PHONE
1307	3-718-337-01	s	LEVER, SKEW
1308	3-718-341-01	o	PANEL, METER

SWITCHING REGULATOR


1405
BVTT4×10
B2.6×4
1406
BVTT4×10
1402
BVTT4×10
PWH3×6
PWH3×6
BVTT6×4
1404
PWH3×6
B3×6
PWH3×6
BVTT4×10
1403
1401
BVTT6×4
PWH3×6
B3×6

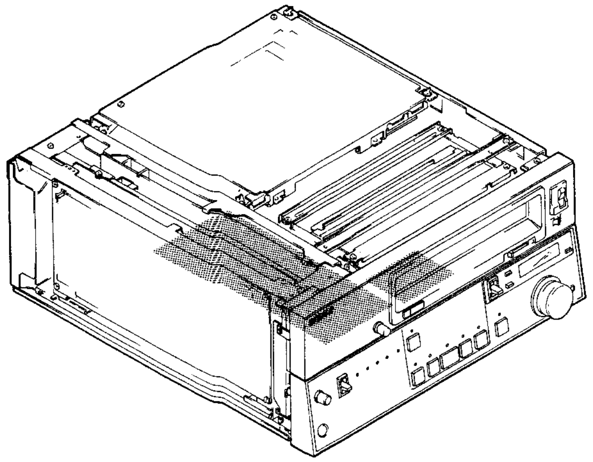
No.	Part No.	SP	Description
⚠1401	1-413-249-12	s	SWITCHING REGULATOR (UR-14E)
1402	1-622-786-11	o	PRINTED CIRCUIT BOARD, AC-89
1403	1-622-221-21	o	PRINTED CIRCUIT BOARD, DC-31A
⚠1404	1-509-546-00	s	3P INLET
1405	1-516-779-XX	s	SLIDE SWITCH
1406	3-672-640-00	o	INSULATOR, AC

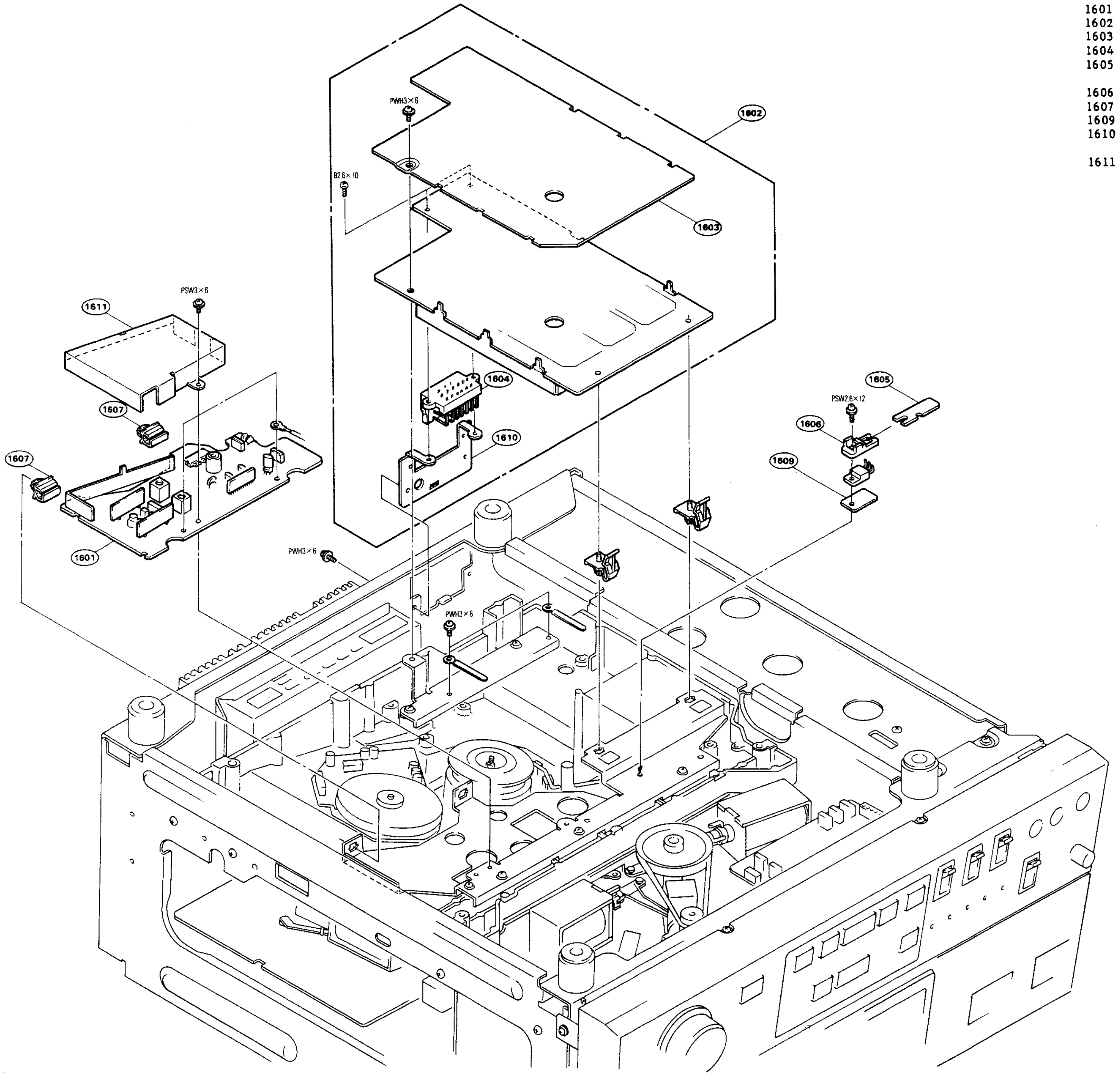
CONNECTOR PANEL


1501
1507
1502
1504
1503
1506
1505
P2.6×5
BVTT4×10
BVTT2.6×4
BVTT4×10
BVTT4×10
PWH3×6
B3×6
BVTT4×10

No.	Part No.	SP	Description
1501	A-6713-282-A	o	MOUNTED CIRCUIT BOARD, CP-112A
1502	1-555-977-00	s	CONNECTOR ASS'Y, DIN
1503	1-560-403-00	o	CONNECTOR, PC BOARD
1504	1-563-030-21	s	CONNECTOR (RECEPTACLE) 3P
1505	3-667-811-00	o	LID, MD
1506	3-672-756-01	o	CASE, RF
1507	3-718-344-11	o	BRACKET, XLR

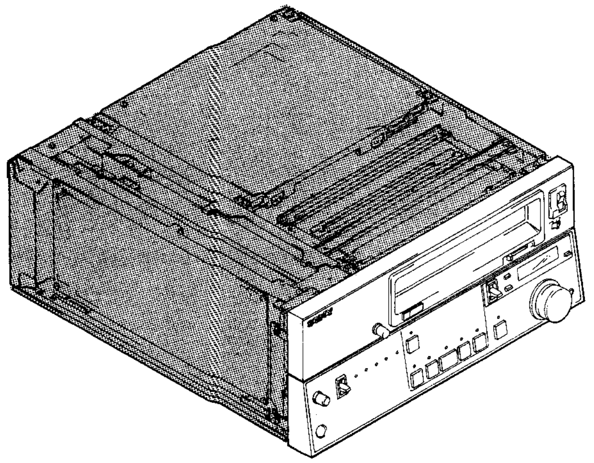
CHASSIS BLOCK (3), BOTTOM

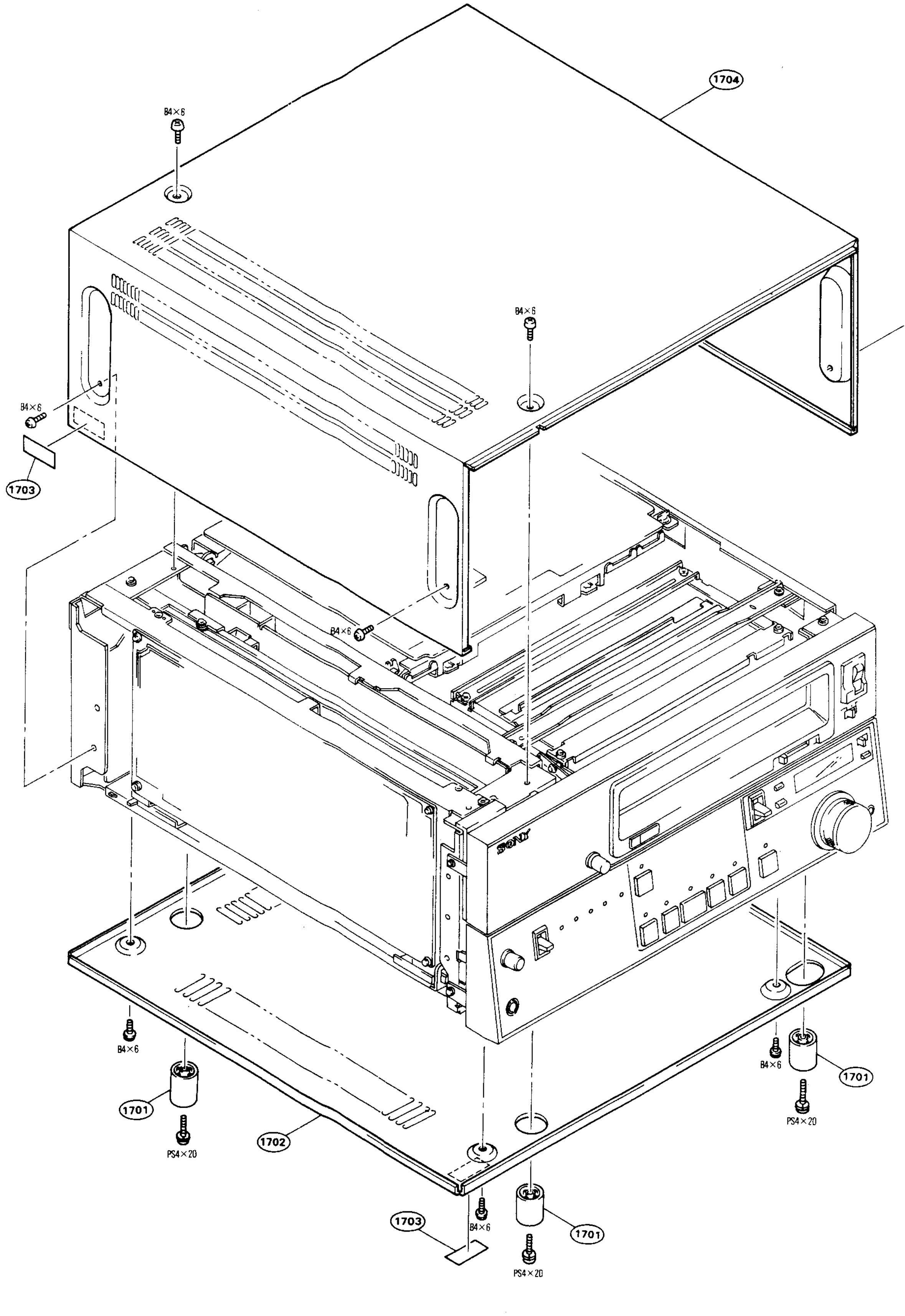



1602
PWH3×6
B2.6×10
1603
PSW3×6
1611
1604
1605
PSW2.6×12
1606
1607
1610
1609
1607
1601
PWH3×6
PWH3×6

No.	Part No.	SP	Description
1601	A-6711-863-A	o	MOUNTED CIRCUIT BOARD, RP-35A
1602	A-6717-450-A	o	MOUNTED CIRCUIT BOARD, IF-132
1603	X-3718-306-1	o	PLATE BLOCK ASS'Y, SHIELD IF
1604	1-566-615-11	s	CONNECTOR, SQUARE 33P
1605	1-605-018-00	o	PRINTED CIRCUIT BOARD, PT-9
1606	3-669-904-00	o	HOLDER, PT
1607	3-703-072-00	o	HOLDER, PCB
1609	3-703-207-11	s	INSULATOR, TO-220
1610	3-718-321-01	o	BRACKET, CONNECTOR
1611	3-718-368-01	o	PLATE (UPPER), SHIELD, RP

ORNAMENTAL PANEL BLOCK




1704
B4×6
B4×6
B4×6
B4×6
1703
B4×6
SONY
B4×6
B4×6
1701
1701
PS4×20
PS4×20
1702
1703
B4×6
1701
PS4×20

No.	Part No.	SP	Description
1701	3-642-656-01	s	LEG
1702	3-672-766-01	o	BOARD, BOTTOM
1703	3-703-079-31	o	LABEL, CAUTION (BACK)
1704	3-718-347-01	o	CASE, U

15-3. ELECTRICAL PARTS LIST

General Purpose Electrical Parts List

Parts that are not listed in the "reference numbers order list" are shown in following list.
Reference numbers are omitted.

CAPACITOR

.MYLAR

Part No.	SP	Description
1-130-467-00	s	CAP, MYLAR 470pF 5% 50V
1-130-468-00	s	CAP, MYLAR 560pF 5% 50V
1-130-469-00	s	CAP, MYLAR 680pF 5% 50V
1-130-470-00	s	CAP, MYLAR 820pF 5% 50V
1-130-471-00	s	CAP, MYLAR 1000pF 5% 50V
1-130-472-00	s	CAP, MYLAR 1200pF 5% 50V
1-130-473-00	s	CAP, MYLAR 1500pF 5% 50V
1-130-474-00	s	CAP, MYLAR 1800pF 5% 50V
1-130-475-00	s	CAP, MYLAR 2200pF 5% 50V
1-130-476-00	s	CAP, MYLAR 2700pF 5% 50V
1-130-477-00	s	CAP, MYLAR 3300pF 5% 50V
1-130-478-00	s	CAP, MYLAR 3900pF 5% 50V
1-130-479-00	s	CAP, MYLAR 4700pF 5% 50V
1-130-480-00	s	CAP, MYLAR 5600pF 5% 50V
1-130-481-00	s	CAP, MYLAR 6800pF 5% 50V
1-130-482-00	s	CAP, MYLAR 8200pF 5% 50V
1-130-483-00	s	CAP, MYLAR 0.01 5% 50V
1-130-484-00	s	CAP, MYLAR 0.012 5% 50V
1-130-485-00	s	CAP, MYLAR 0.015 5% 50V
1-130-486-00	s	CAP, MYLAR 0.018 5% 50V
1-130-487-00	s	CAP, MYLAR 0.022 5% 50V
1-130-488-00	s	CAP, MYLAR 0.027 5% 50V
1-130-489-00	s	CAP, MYLAR 0.033 5% 50V
1-130-490-11	s	CAP, MYLAR 0.039 5% 50V
1-130-491-00	s	CAP, MYLAR 0.047 5% 50V
1-130-492-11	s	CAP, MYLAR 0.056 5% 50V
1-130-493-00	s	CAP, MYLAR 0.068 5% 50V
1-130-494-11	s	CAP, MYLAR 0.082 5% 50V
1-130-495-00	s	CAP, MYLAR 0.1 5% 50V
1-130-496-00	s	CAP, MYLAR 0.12 5% 50V
1-130-497-00	s	CAP, MYLAR 0.15 5% 50V
1-130-498-00	s	CAP, MYLAR 0.18 5% 50V
1-130-499-00	s	CAP, MYLAR 0.22 5% 50V
1-136-502-11	s	CAP, MYLAR 0.33 5% 50V

.MICA,SILVERED

Part No.	SP	Description
1-107-019-00	s	CAP, MICA 1.0pF ±0.5pF 500V
1-107-039-00	s	CAP, MICA 1.2pF ±0.5pF 500V
1-107-040-00	s	CAP, MICA 1.5pF ±0.5pF 500V
1-107-041-00	s	CAP, MICA 1.8pF ±0.5pF 500V
1-107-042-00	s	CAP, MICA 2.2pF ±0.5pF 500V
1-107-043-00	s	CAP, MICA 2.7pF ±0.5pF 500V
1-107-044-00	s	CAP, MICA 3.3pF ±0.5pF 500V
1-107-045-00	s	CAP, MICA 3.9pF ±0.5pF 500V
1-107-046-00	s	CAP, MICA 4.7pF ±0.5pF 500V
1-107-026-00	s	CAP, MICA 5.1pF ±0.5pF 500V
1-107-047-00	s	CAP, MICA 5.6pF ±0.5pF 500V
1-107-048-00	s	CAP, MICA 6.8pF ±0.5pF 500V
1-107-049-00	s	CAP, MICA 8.2pF ±0.5pF 500V
1-107-202-00	s	CAP, MICA 10pF 5% 500V
1-107-203-00	s	CAP, MICA 11pF 5% 500V
1-107-204-00	s	CAP, MICA 12pF 5% 500V
1-107-205-00	s	CAP, MICA 13pF 5% 500V
1-107-206-00	s	CAP, MICA 15pF 5% 500V
1-107-207-00	s	CAP, MICA 16pF 5% 500V
1-107-208-00	s	CAP, MICA 18pF 5% 500V
1-107-209-00	s	CAP, MICA 20pF 5% 500V
1-107-210-00	s	CAP, MICA 22pF 5% 500V
1-107-211-00	s	CAP, MICA 24pF 5% 500V
1-107-157-00	s	CAP, MICA 27pF 5% 500V
1-107-158-00	s	CAP, MICA 30pF 5% 500V
1-107-159-00	s	CAP, MICA 33pF 5% 500V
1-107-074-00	s	CAP, MICA 36pF 5% 50V
1-107-075-00	s	CAP, MICA 39pF 5% 50V
1-107-076-00	s	CAP, MICA 43pF 5% 50V
1-107-077-00	s	CAP, MICA 47pF 5% 50V
1-107-164-00	s	CAP, MICA 51pF 5% 500V
1-107-165-00	s	CAP, MICA 56pF 5% 500V
1-107-166-00	s	CAP, MICA 62pF 5% 500V
1-107-036-00	s	CAP, MICA 68pF 5% 500V
1-107-167-00	s	CAP, MICA 75pF 5% 500V
1-107-083-00	s	CAP, MICA 82pF 5% 50V
1-107-084-00	s	CAP, MICA 91pF 5% 50V
1-107-085-00	s	CAP, MICA 100pF 5% 50V
1-107-086-00	s	CAP, MICA 110pF 5% 50V
1-107-087-00	s	CAP, MICA 120pF 5% 50V
1-109-538-00	s	CAP, MICA 130pF 5% 100V
1-109-539-00	s	CAP, MICA 150pF 5% 100V
1-107-090-00	s	CAP, MICA 160pF 5% 50V
1-109-540-00	s	CAP, MICA 180pF 5% 100V
1-109-541-00	s	CAP, MICA 200pF 5% 100V
1-109-542-00	s	CAP, MICA 220pF 5% 100V
1-109-545-00	s	CAP, MICA 270pF 5% 100V
1-109-547-00	s	CAP, MICA 330pF 5% 100V
1-109-549-00	s	CAP, MICA 390pF 5% 100V
1-109-633-00	s	CAP, MICA 470pF 2% 500V
1-109-555-00	s	CAP, MICA 560pF 5% 100V
1-109-635-00	s	CAP, MICA 470pF 2% 500V

Part No.	SP	Description
.ELECTROLYTIC		
1-124-902-00	s	CAP, ELECT 0.47 20% 50V
1-124-791-11	s	CAP, ELECT 1.0 20% 100V
1-124-925-11	s	CAP, ELECT 2.2 20% 100V
1-123-382-00	s	CAP, ELECT 3.3 20% 100V
1-124-927-00	s	CAP, ELECT 4.7 20% 100V
1-123-875-91	s	CAP, ELECT 10 20% 50V
1-124-915-11	s	CAP, ELECT 10 20% 63V
1-124-667-11	s	CAP, ELECT 10 20% 100V
1-124-908-11	s	CAP, ELECT 22 20% 50V
1-124-916-11	s	CAP, ELECT 22 20% 63V
1-124-929-11	s	CAP, ELECT 22 20% 100V
1-124-963-11	s	CAP, ELECT 33 20% 16V
1-124-482-11	s	CAP, ELECT 33 20% 35V
1-124-917-11	s	CAP, ELECT 33 20% 63V
1-124-930-11	s	CAP, ELECT 33 20% 100V
1-124-446-11	s	CAP, ELECT 47 20% 10V
1-124-477-11	s	CAP, ELECT 47 20% 25V
1-124-910-11	s	CAP, ELECT 47 20% 50V
1-124-918-11	s	CAP, ELECT 47 20% 63V
1-124-931-11	s	CAP, ELECT 47 20% 100V
1-124-443-00	s	CAP, ELECT 100 20% 10V
1-126-101-11	s	CAP, ELECT 100 20% 16V
1-124-478-11	s	CAP, ELECT 100 20% 25V
1-124-122-11	s	CAP, ELECT 100 20% 50V
1-124-572-11	s	CAP, ELECT 100 20% 63V
1-123-605-00	s	CAP, ELECT 100 20% 100V
1-124-444-00	s	CAP, ELECT 220 20% 10V
1-124-120-11	s	CAP, ELECT 220 20% 25V
1-124-484-11	s	CAP, ELECT 220 20% 35V
1-124-911-11	s	CAP, ELECT 220 20% 50V
1-124-919-51	s	CAP, ELECT 220 20% 63V
1-124-628-11	s	CAP, ELECT 220 20% 100V
1-124-442-00	s	CAP, ELECT 330 20% 6.3V
1-124-604-00	s	CAP, ELECT 330 20% 10V
1-124-119-00	s	CAP, ELECT 330 20% 16V
1-124-479-11	s	CAP, ELECT 330 20% 25V
1-124-485-11	s	CAP, ELECT 330 20% 35V
1-124-912-11	s	CAP, ELECT 330 20% 50V
1-124-472-11	s	CAP, ELECT 470 20% 10V
1-124-475-11	s	CAP, ELECT 470 20% 16V
1-124-480-11	s	CAP, ELECT 470 20% 25V
1-126-104-11	s	CAP, ELECT 470 20% 35V
1-124-913-11	s	CAP, ELECT 470 20% 50V
1-124-921-11	s	CAP, ELECT 470 20% 63V
1-124-471-00	s	CAP, ELECT 1000 20% 6.3V
1-124-473-11	s	CAP, ELECT 1000 20% 10V
1-124-555-00	s	CAP, ELECT 1000 20% 16V
1-124-557-11	s	CAP, ELECT 1000 20% 25V
1-126-105-11	s	CAP, ELECT 1000 20% 35V
1-124-637-11	s	CAP, ELECT 1000 20% 50V
1-124-922-11	s	CAP, ELECT 1000 20% 63V
1-124-893-11	s	CAP, ELECT 2200 20% 10V
1-124-556-11	s	CAP, ELECT 2200 20% 16V
1-124-563-11	s	CAP, ELECT 2200 20% 25V
1-124-618-11	s	CAP, ELECT 2200 20% 35V
1-124-607-11	s	CAP, ELECT 2200 20% 50V
1-124-621-11	s	CAP, ELECT 3300 20% 6.3V
1-124-887-00	s	CAP, ELECT 3300 20% 16V
1-124-636-00	s	CAP, ELECT 3300 20% 25V
1-124-762-00	s	CAP, ELECT 4700 20% 10V
1-124-898-11	s	CAP, ELECT 4700 20% 16V
1-124-564-11	s	CAP, ELECT 4700 20% 25V
1-124-891-11	s	CAP, ELECT 10000 20% 6.3V
1-124-763-00	s	CAP, ELECT 10000 20% 10V

Part No.	SP	Description
.CHIP, CERAMIC		
1-163-083-00	s	CAP, CHIP CERAMIC 1pF ±0.25pF 50V
1-163-085-00	s	CAP, CHIP CERAMIC 2pF ±0.25pF 50V
1-163-087-00	s	CAP, CHIP CERAMIC 4pF ±0.25pF 50V
1-163-089-00	s	CAP, CHIP CERAMIC 6pF ±0.5pF 50V
1-163-091-00	s	CAP, CHIP CERAMIC 8pF ±0.5pF 50V
1-163-093-00	s	CAP, CHIP CERAMIC 10pF 5% 50V
1-163-097-00	s	CAP, CHIP CERAMIC 15pF 5% 50V
1-163-101-00	s	CAP, CHIP CERAMIC 22pF 5% 50V
1-163-105-00	s	CAP, CHIP CERAMIC 33pF 5% 50V
1-163-109-00	s	CAP, CHIP CERAMIC 47pF 5% 50V
1-163-113-00	s	CAP, CHIP CERAMIC 68pF 5% 50V
1-163-117-00	s	CAP, CHIP CERAMIC 100pF 5% 50V
1-163-121-00	s	CAP, CHIP CERAMIC 150pF 5% 50V
1-163-125-00	s	CAP, CHIP CERAMIC 220pF 5% 50V
1-163-129-00	s	CAP, CHIP CERAMIC 330pF 5% 50V
1-163-133-00	s	CAP, CHIP CERAMIC 470pF 5% 50V
1-163-137-00	s	CAP, CHIP CERAMIC 680pF 5% 50V
1-163-141-00	s	CAP, CHIP CERAMIC 1000pF 5% 50V
1-163-145-00	s	CAP, CHIP CERAMIC 1500pF 10% 50V
1-163-013-00	s	CAP, CHIP CERAMIC 2200pF 10% 50V
1-163-015-00	s	CAP, CHIP CERAMIC 3300pF 10% 50V
1-163-017-00	s	CAP, CHIP CERAMIC 4700pF 10% 50V
1-163-019-00	s	CAP, CHIP CERAMIC 6800pF 10% 50V
1-163-021-00	s	CAP, CHIP CERAMIC 0.01 10% 50V
1-163-023-00	s	CAP, CHIP CERAMIC 0.015 10% 50V
1-163-034-00	s	CAP, CHIP CERAMIC 0.033 50V
1-163-035-00	s	CAP, CHIP CERAMIC 0.047 50V
1-163-036-00	s	CAP, CHIP CERAMIC 0.068 50V
1-163-038-00	s	CAP, CHIP CERAMIC 0.1 50V

Part No.	SP	Description
INDUCTOR		
.MICRO		
1-408-397-00	s	INDUCTOR, MICRO 1.0 5%
1-408-399-00	s	INDUCTOR, MICRO 1.5 5%
1-408-400-00	s	INDUCTOR, MICRO 1.8 5%
1-408-401-00	s	INDUCTOR, MICRO 2.2 5%
1-408-403-00	s	INDUCTOR, MICRO 3.3 5%
1-408-404-00	s	INDUCTOR, MICRO 3.9 5%
1-408-405-00	s	INDUCTOR, MICRO 4.7 5%
1-408-406-00	s	INDUCTOR, MICRO 5.6 5%
1-408-407-00	s	INDUCTOR, MICRO 6.8 5%
1-408-408-00	s	INDUCTOR, MICRO 8.2 5%
1-408-409-00	s	INDUCTOR, MICRO 10 5%
1-408-410-00	s	INDUCTOR, MICRO 12 5%
1-408-411-00	s	INDUCTOR, MICRO 15 5%
1-408-412-00	s	INDUCTOR, MICRO 18 5%
1-408-413-00	s	INDUCTOR, MICRO 22 5%
1-408-414-00	s	INDUCTOR, MICRO 27 5%
1-408-415-00	s	INDUCTOR, MICRO 33 5%
1-408-416-00	s	INDUCTOR, MICRO 39 5%
1-408-417-00	s	INDUCTOR, MICRO 47 5%
1-408-418-00	s	INDUCTOR, MICRO 56 5%
1-408-419-00	s	INDUCTOR, MICRO 68 5%
1-408-420-00	s	INDUCTOR, MICRO 82 5%
1-408-421-00	s	INDUCTOR, MICRO 100 5%
1-408-422-00	s	INDUCTOR, MICRO 120 5%
1-408-423-00	s	INDUCTOR, MICRO 150 5%
1-408-424-00	s	INDUCTOR, MICRO 180 5%
1-408-425-00	s	INDUCTOR, MICRO 220 5%
1-408-426-00	s	INDUCTOR, MICRO 270 5%
1-408-427-00	s	INDUCTOR, MICRO 330 5%
1-408-428-00	s	INDUCTOR, MICRO 390 5%
1-408-429-00	s	INDUCTOR, MICRO 470 5%
1-410-116-11	s	INDUCTOR, MICRO 560 5%
1-410-492-11	s	INDUCTOR, MICRO 680 5%
1-410-493-11	s	INDUCTOR, MICRO 820 5%
1-410-494-11	s	INDUCTOR, MICRO 1000 5%

Part No.	SP	Description
RESISTOR		
.CARBON		
1-249-381-11	s	RES, CARBON 1.0 5% 1/6W
1-249-382-11	s	RES, CARBON 1.2 5% 1/6W
1-249-383-11	s	RES, CARBON 1.5 5% 1/6W
1-249-384-11	s	RES, CARBON 1.8 5% 1/6W
1-249-385-11	s	RES, CARBON 2.2 5% 1/6W
1-249-386-11	s	RES, CARBON 2.7 5% 1/6W
1-249-387-11	s	RES, CARBON 3.3 5% 1/6W
1-249-388-11	s	RES, CARBON 3.9 5% 1/6W
1-249-389-11	s	RES, CARBON 4.7 5% 1/6W
1-249-390-11	s	RES, CARBON 5.6 5% 1/6W
1-249-391-11	s	RES, CARBON 6.8 5% 1/6W
1-249-392-11	s	RES, CARBON 8.2 5% 1/6W
1-249-393-11	s	RES, CARBON 10 5% 1/6W
1-249-394-11	s	RES, CARBON 12 5% 1/6W
1-249-395-11	s	RES, CARBON 15 5% 1/6W
1-249-396-11	s	RES, CARBON 18 5% 1/6W
1-249-397-11	s	RES, CARBON 22 5% 1/6W
1-249-398-11	s	RES, CARBON 27 5% 1/6W
1-249-399-11	s	RES, CARBON 33 5% 1/6W
1-249-400-11	s	RES, CARBON 39 5% 1/6W
1-249-401-11	s	RES, CARBON 47 5% 1/6W
1-249-402-11	s	RES, CARBON 56 5% 1/6W
1-249-403-11	s	RES, CARBON 68 5% 1/6W
1-215-394-00	s	RES, METAL 75 1% 1/6W
1-249-404-11	s	RES, CARBON 82 5% 1/6W
1-249-405-11	s	RES, CARBON 100 5% 1/6W
1-249-406-11	s	RES, CARBON 120 5% 1/6W
1-249-407-11	s	RES, CARBON 150 5% 1/6W
1-249-408-11	s	RES, CARBON 180 5% 1/6W
1-249-409-11	s	RES, CARBON 220 5% 1/6W
1-249-410-11	s	RES, CARBON 270 5% 1/6W
1-249-411-11	s	RES, CARBON 330 5% 1/6W
1-249-412-11	s	RES, CARBON 390 5% 1/6W
1-249-413-11	s	RES, CARBON 470 5% 1/6W
1-249-414-11	s	RES, CARBON 560 5% 1/6W
1-249-415-11	s	RES, CARBON 680 5% 1/6W
1-249-416-11	s	RES, CARBON 820 5% 1/6W
1-249-417-11	s	RES, CARBON 1.0k 5% 1/6W
1-249-418-11	s	RES, CARBON 1.2k 5% 1/6W
1-249-419-11	s	RES, CARBON 1.5k 5% 1/6W
1-249-420-11	s	RES, CARBON 1.8k 5% 1/6W
1-249-421-11	s	RES, CARBON 2.2k 5% 1/6W
1-249-422-11	s	RES, CARBON 2.7k 5% 1/6W
1-249-423-11	s	RES, CARBON 3.3k 5% 1/6W
1-249-424-11	s	RES, CARBON 3.9k 5% 1/6W
1-249-425-11	s	RES, CARBON 4.7k 5% 1/6W
1-249-426-11	s	RES, CARBON 5.6k 5% 1/6W
1-249-427-11	s	RES, CARBON 6.8k 5% 1/6W
1-249-428-11	s	RES, CARBON 8.2k 5% 1/6W
1-249-429-11	s	RES, CARBON 10k 5% 1/6W
1-249-430-11	s	RES, CARBON 12k 5% 1/6W
1-249-431-11	s	RES, CARBON 15k 5% 1/6W
1-249-432-11	s	RES, CARBON 18k 5% 1/6W
1-249-433-11	s	RES, CARBON 22k 5% 1/6W
1-249-434-11	s	RES, CARBON 27k 5% 1/6W
1-249-435-11	s	RES, CARBON 33k 5% 1/6W
1-249-436-11	s	RES, CARBON 39k 5% 1/6W
1-249-437-11	s	RES, CARBON 47k 5% 1/6W
1-249-438-11	s	RES, CARBON 56k 5% 1/6W
1-249-439-11	s	RES, CARBON 68k 5% 1/6W
1-249-440-11	s	RES, CARBON 82k 5% 1/6W
1-249-441-11	s	RES, CARBON 100k 5% 1/6W
1-215-471-00	s	RES, METAL 120k 1% 1/6W
1-215-473-00	s	RES, METAL 150k 1% 1/6W
1-215-475-00	s	RES, METAL 180k 1% 1/6W
1-215-477-00	s	RES, METAL 220k 1% 1/6W
1-215-479-00	s	RES, METAL 270k 1% 1/6W
1-215-481-00	s	RES, METAL 330k 1% 1/6W
1-215-483-00	s	RES, METAL 390k 1% 1/6W
1-215-485-00	s	RES, METAL 470k 1% 1/6W
1-215-487-00	s	RES, METAL 560k 1% 1/6W
1-215-489-00	s	RES, METAL 680k 1% 1/6W
1-215-491-00	s	RES, METAL 820k 1% 1/6W
1-215-493-00	s	RES, METAL 1.0M 1% 1/6W

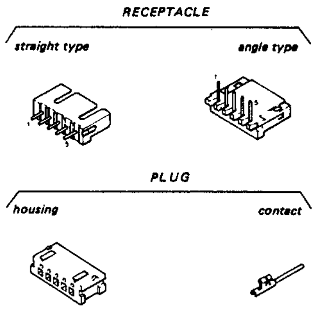
.METAL

Part No.	SP	Description
1-215-373-31	s	RES, METAL 10 1% 1/6W
1-215-374-00	s	RES, METAL 11 1% 1/6W
1-215-375-00	s	RES, METAL 12 1% 1/6W
1-215-376-00	s	RES, METAL 13 1% 1/6W
1-215-377-00	s	RES, METAL 15 1% 1/6W
1-215-378-00	s	RES, METAL 16 1% 1/6W
1-215-379-00	s	RES, METAL 18 1% 1/6W
1-215-380-00	s	RES, METAL 20 1% 1/6W
1-215-381-00	s	RES, METAL 22 1% 1/6W
1-215-382-00	s	RES, METAL 24 1% 1/6W
1-215-383-00	s	RES, METAL 27 1% 1/6W
1-215-384-00	s	RES, METAL 30 1% 1/6W
1-215-385-00	s	RES, METAL 33 1% 1/6W
1-215-386-00	s	RES, METAL 36 1% 1/6W
1-215-387-00	s	RES, METAL 39 1% 1/6W
1-215-388-00	s	RES, METAL 43 1% 1/6W
1-215-389-00	s	RES, METAL 47 1% 1/6W
1-215-390-00	s	RES, METAL 51 1% 1/6W
1-215-391-00	s	RES, METAL 56 1% 1/6W
1-215-392-00	s	RES, METAL 62 1% 1/6W
1-215-393-00	s	RES, METAL 68 1% 1/6W
1-215-394-00	s	RES, METAL 75 1% 1/6W
1-215-395-00	s	RES, METAL 82 1% 1/6W
1-215-396-00	s	RES, METAL 91 1% 1/6W
1-215-397-00	s	RES, METAL 100 1% 1/6W
1-215-398-00	s	RES, METAL 110 1% 1/6W
1-215-399-00	s	RES, METAL 120 1% 1/6W
1-215-400-00	s	RES, METAL 130 1% 1/6W
1-215-401-00	s	RES, METAL 150 1% 1/6W
1-215-402-00	s	RES, METAL 160 1% 1/6W
1-215-403-00	s	RES, METAL 180 1% 1/6W
1-215-404-00	s	RES, METAL 200 1% 1/6W
1-215-405-00	s	RES, METAL 220 1% 1/6W
1-215-406-00	s	RES, METAL 240 1% 1/6W
1-215-407-00	s	RES, METAL 270 1% 1/6W
1-215-408-00	s	RES, METAL 300 1% 1/6W
1-215-409-00	s	RES, METAL 330 1% 1/6W
1-215-410-00	s	RES, METAL 360 1% 1/6W
1-215-411-00	s	RES, METAL 390 1% 1/6W
1-215-412-00	s	RES, METAL 430 1% 1/6W
1-215-413-00	s	RES, METAL 470 1% 1/6W
1-215-414-00	s	RES, METAL 510 1% 1/6W
1-215-415-00	s	RES, METAL 560 1% 1/6W
1-215-416-00	s	RES, METAL 620 1% 1/6W
1-215-417-00	s	RES, METAL 680 1% 1/6W
1-215-418-00	s	RES, METAL 750 1% 1/6W
1-215-419-00	s	RES, METAL 820 1% 1/6W
1-215-420-00	s	RES, METAL 910 1% 1/6W
1-215-421-00	s	RES, METAL 1.0k 1% 1/6W
1-215-422-00	s	RES, METAL 1.1k 1% 1/6W
1-215-423-00	s	RES, METAL 1.2k 1% 1/6W
1-215-424-00	s	RES, METAL 1.3k 1% 1/6W
1-215-425-00	s	RES, METAL 1.5k 1% 1/6W
1-215-426-00	s	RES, METAL 1.6k 1% 1/6W
1-215-427-00	s	RES, METAL 1.8k 1% 1/6W
1-215-428-00	s	RES, METAL 2.0k 1% 1/6W
1-215-429-00	s	RES, METAL 2.2k 1% 1/6W
1-215-430-00	s	RES, METAL 2.4k 1% 1/6W
1-215-431-00	s	RES, METAL 2.7k 1% 1/6W
1-215-432-00	s	RES, METAL 3.0k 1% 1/6W
1-215-433-00	s	RES, METAL 3.3k 1% 1/6W
1-215-434-00	s	RES, METAL 3.6k 1% 1/6W
1-215-435-00	s	RES, METAL 3.9k 1% 1/6W
1-215-436-00	s	RES, METAL 4.3k 1% 1/6W
1-215-437-00	s	RES, METAL 4.7k 1% 1/6W
1-215-438-00	s	RES, METAL 5.1k 1% 1/6W
1-215-439-00	s	RES, METAL 5.6k 1% 1/6W
1-215-440-00	s	RES, METAL 6.2k 1% 1/6W
1-215-441-00	s	RES, METAL 6.8k 1% 1/6W
1-215-442-00	s	RES, METAL 7.5k 1% 1/6W
1-215-443-00	s	RES, METAL 8.2k 1% 1/6W
1-215-444-00	s	RES, METAL 9.1k 1% 1/6W
1-215-445-00	s	RES, METAL 10k 1% 1/6W
1-215-446-00	s	RES, METAL 11k 1% 1/6W
1-215-447-00	s	RES, METAL 12k 1% 1/6W
1-215-448-00	s	RES, METAL 13k 1% 1/6W
1-215-449-00	s	RES, METAL 15k 1% 1/6W
1-215-450-00	s	RES, METAL 16k 1% 1/6W
1-215-451-00	s	RES, METAL 18k 1% 1/6W
1-215-452-00	s	RES, METAL 20k 1% 1/6W
1-215-453-00	s	RES, METAL 22k 1% 1/6W
1-215-454-00	s	RES, METAL 24k 1% 1/6W
1-215-455-00	s	RES, METAL 27k 1% 1/6W
1-215-456-00	s	RES, METAL 30k 1% 1/6W
1-215-457-00	s	RES, METAL 33k 1% 1/6W
1-215-458-00	s	RES, METAL 36k 1% 1/6W
1-215-459-00	s	RES, METAL 39k 1% 1/6W
1-215-460-00	s	RES, METAL 43k 1% 1/6W
1-215-461-00	s	RES, METAL 47k 1% 1/6W
1-215-462-00	s	RES, METAL 51k 1% 1/6W
1-215-463-00	s	RES, METAL 56k 1% 1/6W
1-215-464-00	s	RES, METAL 62k 1% 1/6W
1-215-465-00	s	RES, METAL 68k 1% 1/6W
1-215-466-00	s	RES, METAL 75k 1% 1/6W
1-215-467-00	s	RES, METAL 82k 1% 1/6W
1-215-468-00	s	RES, METAL 91k 1% 1/6W
1-215-469-00	s	RES, METAL 100k 1% 1/6W
1-215-470-00	s	RES, METAL 110k 1% 1/6W
1-215-471-00	s	RES, METAL 120k 1% 1/6W
1-215-472-00	s	RES, METAL 130k 1% 1/6W
1-215-473-00	s	RES, METAL 150k 1% 1/6W
1-215-474-00	s	RES, METAL 160k 1% 1/6W
1-215-475-00	s	RES, METAL 180k 1% 1/6W
1-215-476-00	s	RES, METAL 200k 1% 1/6W
1-215-477-00	s	RES, METAL 220k 1% 1/6W
1-215-478-00	s	RES, METAL 240k 1% 1/6W
1-215-479-00	s	RES, METAL 270k 1% 1/6W
1-215-480-00	s	RES, METAL 300k 1% 1/6W
1-215-481-00	s	RES, METAL 330k 1% 1/6W
1-215-482-00	s	RES, METAL 360k 1% 1/6W
1-215-483-00	s	RES, METAL 390k 1% 1/6W
1-215-484-00	s	RES, METAL 430k 1% 1/6W
1-215-485-00	s	RES, METAL 470k 1% 1/6W
1-215-486-00	s	RES, METAL 510k 1% 1/6W
1-215-487-00	s	RES, METAL 560k 1% 1/6W
1-215-488-00	s	RES, METAL 620k 1% 1/6W
1-215-489-00	s	RES, METAL 680k 1% 1/6W
1-215-490-00	s	RES, METAL 750k 1% 1/6W
1-215-491-00	s	RES, METAL 820k 1% 1/6W
1-215-492-00	s	RES, METAL 910k 1% 1/6W
1-215-493-00	s	RES, METAL 1.0M 1% 1/6W

Part No.	SP	Description
.CHIP		
1-216-295-00	s	RES, CHIP 0 5% 1/10W
1-216-298-00	s	RES, CHIP 2.2 5% 1/10W
1-216-302-00	s	RES, CHIP 2.7 5% 1/10W
1-216-304-00	s	RES, CHIP 3.3 5% 1/10W
1-216-306-00	s	RES, CHIP 3.9 5% 1/10W
1-216-308-00	s	RES, CHIP 4.7 5% 1/10W
1-216-309-00	s	RES, CHIP 5.6 5% 1/10W
1-216-311-00	s	RES, CHIP 6.8 5% 1/10W
1-216-313-00	s	RES, CHIP 8.2 5% 1/10W
1-216-001-00	s	RES, CHIP 10 5% 1/10W
1-216-003-00	s	RES, CHIP 12 5% 1/10W
1-216-005-00	s	RES, CHIP 15 5% 1/10W
1-216-007-00	s	RES, CHIP 18 5% 1/10W
1-216-009-00	s	RES, CHIP 22 5% 1/10W
1-216-011-00	s	RES, CHIP 27 5% 1/10W
1-216-013-00	s	RES, CHIP 33 5% 1/10W
1-216-015-00	s	RES, CHIP 39 5% 1/10W
1-216-017-00	s	RES, CHIP 47 5% 1/10W
1-216-019-00	s	RES, CHIP 56 5% 1/10W
1-216-021-00	s	RES, CHIP 68 5% 1/10W
1-216-023-00	s	RES, CHIP 82 5% 1/10W
1-216-025-00	s	RES, CHIP 100 5% 1/10W
1-216-027-00	s	RES, CHIP 120 5% 1/10W
1-216-029-00	s	RES, CHIP 150 5% 1/10W
1-216-031-00	s	RES, CHIP 180 5% 1/10W
1-216-033-00	s	RES, CHIP 220 5% 1/10W
1-216-035-00	s	RES, CHIP 270 5% 1/10W
1-216-037-00	s	RES, CHIP 330 5% 1/10W
1-216-039-00	s	RES, CHIP 390 5% 1/10W
1-216-041-00	s	RES, CHIP 470 5% 1/10W
1-216-043-00	s	RES, CHIP 560 5% 1/10W
1-216-045-00	s	RES, CHIP 680 5% 1/10W
1-216-047-00	s	RES, CHIP 820 5% 1/10W
1-216-049-00	s	RES, CHIP 1k 5% 1/10W
1-216-051-00	s	RES, CHIP 1.2k 5% 1/10W
1-216-053-00	s	RES, CHIP 1.5k 5% 1/10W
1-216-055-00	s	RES, CHIP 1.8k 5% 1/10W
1-216-057-00	s	RES, CHIP 2.2k 5% 1/10W
1-216-059-00	s	RES, CHIP 2.7k 5% 1/10W
1-216-061-00	s	RES, CHIP 3.3k 5% 1/10W
1-216-063-00	s	RES, CHIP 3.9k 5% 1/10W
1-216-065-00	s	RES, CHIP 4.7k 5% 1/10W
1-216-067-00	s	RES, CHIP 5.6k 5% 1/10W
1-216-069-00	s	RES, CHIP 6.8k 5% 1/10W
1-216-071-00	s	RES, CHIP 8.2k 5% 1/10W
1-216-073-00	s	RES, CHIP 10k 5% 1/10W
1-216-075-00	s	RES, CHIP 12k 5% 1/10W
1-216-077-00	s	RES, CHIP 15k 5% 1/10W
1-216-079-00	s	RES, CHIP 18k 5% 1/10W
1-216-081-00	s	RES, CHIP 22k 5% 1/10W
1-216-083-00	s	RES, CHIP 27k 5% 1/10W
1-216-085-00	s	RES, CHIP 33k 5% 1/10W
1-216-087-00	s	RES, CHIP 39k 5% 1/10W
1-216-089-00	s	RES, CHIP 47k 5% 1/10W
1-216-091-00	s	RES, CHIP 56k 5% 1/10W
1-216-093-00	s	RES, CHIP 68k 5% 1/10W
1-216-095-00	s	RES, CHIP 82k 5% 1/10W
1-216-097-00	s	RES, CHIP 100k 5% 1/10W
1-216-099-00	s	RES, CHIP 120k 5% 1/10W
1-216-101-00	s	RES, CHIP 150k 5% 1/10W
1-216-103-00	s	RES, CHIP 180k 5% 1/10W
1-216-105-00	s	RES, CHIP 220k 5% 1/10W
1-216-107-00	s	RES, CHIP 270k 5% 1/10W
1-216-109-00	s	RES, CHIP 330k 5% 1/10W
1-216-111-00	s	RES, CHIP 390k 5% 1/10W
1-216-113-00	s	RES, CHIP 470k 5% 1/10W
1-216-115-00	s	RES, CHIP 560k 5% 1/10W
1-216-117-00	s	RES, CHIP 680k 5% 1/10W
1-216-119-00	s	RES, CHIP 820k 5% 1/10W
1-216-121-00	s	RES, CHIP 1.0M 5% 1/10W
1-216-123-00	s	RES, CHIP 1.2M 5% 1/10W
1-216-125-00	s	RES, CHIP 1.5M 5% 1/10W
1-216-127-00	s	RES, CHIP 1.8M 5% 1/10W
1-216-129-00	s	RES, CHIP 2.2M 5% 1/10W
1-216-131-00	s	RES, CHIP 2.7M 5% 1/10W
1-216-133-00	s	RES, CHIP 3.3M 5% 1/10W

CONNECTOR

Part No.	SP	Description
1-564-001-11	o	RECEPTACLE 2P MALE (STRAIGHT TYPE)
1-564-012-11	o	RECEPTACLE 2P MALE (ANGLE TYPE)
1-562-147-11	o	HOUSING 2P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-002-11	o	RECEPTACLE 3P MALE (STRAIGHT TYPE)
1-564-013-11	o	RECEPTACLE 3P MALE (ANGLE TYPE)
1-562-148-11	o	HOUSING 3P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-003-11	o	RECEPTACLE 4P MALE (STRAIGHT TYPE)
1-564-014-11	o	RECEPTACLE 4P MALE (ANGLE TYPE)
1-562-149-11	o	HOUSING 4P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-004-11	o	RECEPTACLE 5P MALE (STRAIGHT TYPE)
1-564-015-11	o	RECEPTACLE 5P MALE (ANGLE TYPE)
1-562-150-11	o	HOUSING 5P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-005-11	o	RECEPTACLE 6P MALE (STRAIGHT TYPE)
1-564-016-11	o	RECEPTACLE 6P MALE (ANGLE TYPE)
1-562-151-11	o	HOUSING 6P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-006-11	o	RECEPTACLE 7P MALE (STRAIGHT TYPE)
1-564-017-11	o	RECEPTACLE 7P MALE (ANGLE TYPE)
1-562-152-11	o	HOUSING 7P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-007-11	o	RECEPTACLE 8P MALE (STRAIGHT TYPE)
1-564-018-11	o	RECEPTACLE 8P MALE (ANGLE TYPE)
1-562-153-11	o	HOUSING 8P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-008-41	o	RECEPTACLE 9P MALE (STRAIGHT TYPE)
1-564-019-11	o	RECEPTACLE 9P MALE (ANGLE TYPE)
1-562-154-11	o	HOUSING 9P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-009-11	o	RECEPTACLE 10P MALE (STRAIGHT TYPE)
1-564-020-11	o	RECEPTACLE 10P MALE (ANGLE TYPE)
1-562-155-11	o	HOUSING 10P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-010-21	o	RECEPTACLE 11P MALE (STRAIGHT TYPE)
1-564-021-11	o	RECEPTACLE 11P MALE (ANGLE TYPE)
1-562-156-11	o	HOUSING 11P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-011-11	o	RECEPTACLE 12P MALE (STRAIGHT TYPE)
1-564-022-11	o	RECEPTACLE 12P MALE (ANGLE TYPE)
1-562-157-11	o	HOUSING 12P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-683-11	o	RECEPTACLE 13P MALE (STRAIGHT TYPE)
1-564-743-11	o	RECEPTACLE 13P MALE (ANGLE TYPE)
1-562-627-11	o	HOUSING 13P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-069-11	o	RECEPTACLE 14P MALE (STRAIGHT TYPE)
1-564-630-11	o	RECEPTACLE 14P MALE (ANGLE TYPE)
1-562-185-11	o	HOUSING 14P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-855-11	o	RECEPTACLE 15P MALE (STRAIGHT TYPE)
1-564-877-11	o	RECEPTACLE 15P MALE (ANGLE TYPE)
1-562-958-11	o	HOUSING 15P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32



PARTS CHANGE INFORMATION

.In this parts list, **) marked parts are design-changed.
.Applicable Serial No. are as follows:

1) Marked parts are for
Serial No. up to 10350

2) Marked parts are for
Serial No. 10351 and higher

3) Marked parts are for
Serial No. up to 10750

4) Marked parts are for
Serial No. 10751 and higher

5) Marked parts are for
Serial No. up to 11050

6) Marked parts are for
Serial No. 11051 and higher

Ref No.	Parts No.	SP	Description
AC-89 BOARD			
	1-622-786-11	o	PRINTED CIRCUIT BOARD, AC-89
	1-533-189-11	o	HOLDER, FUSE
⚠C1	1-136-211-00	s	FILM 0.022 20% 250V
C2	1-130-711-00	s	FILM 0.22 20% 250V
⚠CN1	1-506-371-00	o	2P PLUG (L)
⚠F1	1-532-203-00	s	FUSE, TIME-LAG 2.0A 250V
⚠L1	1-421-556-21	s	LINE FILTER
⚠R1	1-214-937-00	s	CARBON 1M 5% 1/2W
AU-82A BOARD			
	A-6713-280-A	o	MOUNTED CIRCUIT BOARD, AU-82A
C102	1-162-286-31	s	CERAMIC 220PF 10% 50V
C304	1-162-286-31	s	CERAMIC 220PF 10% 50V
D52	8-719-911-19	s	1SS119
D53	8-719-911-19	s	1SS119
D103	8-719-911-19	s	1SS119
D104	8-719-109-91	s	RD6.2ES-B
D151	8-719-109-91	s	RD6.2ES-B
D303	8-719-911-19	s	1SS119
D351	8-719-109-91	s	RD6.2ES-B
D501	8-719-109-91	s	RD6.2ES-B
D503	8-719-200-77	s	10E2N
D504	8-719-911-19	s	1SS119
D505	8-719-911-19	s	1SS119
IC51	8-759-802-46	s	LA4550 (SANYO)
IC101	8-759-700-04	s	NJM2043D-D (JRC)
IC102	8-759-705-62	s	NJM4562D-D (JRC)
LV101	1-459-434-00	s	VAR 22mH
LV302	1-459-434-00	s	VAR 22mH

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
Q7	8-729-201-05	s	2SC2878-B
Q8	8-729-178-55	s	2SC2785-E
Q51	8-729-201-05	s	2SC2878-B
Q53	8-729-178-55	s	2SC2785-E
Q54	8-729-201-05	s	2SC2878-B
Q55	8-729-201-05	s	2SC2878-B
Q106	8-729-201-05	s	2SC2878-B
Q206	8-729-201-05	s	2SC2878-B
Q207	8-729-178-55	s	2SC2785-E
Q251	8-729-201-05	s	2SC2878-B
Q306	8-729-201-05	s	2SC2878-B
Q403	8-729-117-54	s	2SA1175-K
Q501	8-729-178-55	s	2SC2785-E
Q502	8-729-113-33	s	2SB733-4
Q503	8-729-117-56	s	2SA1175-K
R177	1-247-887-00	s	CARBON 220k 5% 1/4W
R124	1-247-881-00	s	CARBON 120k 5% 1/4W
R126	1-247-881-00	s	CARBON 120k 5% 1/4W
R321	1-247-887-00	s	CARBON 220k 5% 1/4W
R327	1-247-881-00	s	CARBON 120k 5% 1/4W
R329	1-247-881-00	s	CARBON 120k 5% 1/4W
R507	1-247-885-00	s	CARBON 180k 5% 1/4W
R509	1-247-744-11	s	CARBON 270 5% 1/2W
RV101	1-228-994-00	s	VAR, CARBON 10k
RV102	1-228-994-00	s	VAR, CARBON 10k
RV103	1-228-993-00	s	VAR, CARBON 4.7k
RV302	1-228-994-00	s	VAR, CARBON 10k
RV303	1-228-994-00	s	VAR, CARBON 10k
RV304	1-228-993-00	s	VAR, CARBON 4.7k

AU-89A BOARD

Ref No.	Parts No.	SP	Description
	A-6713-281-A	o	MOUNTED CIRCUIT BOARD, AU-89A
C3	1-136-230-00	s	FILM 0.0022 3% 100V
C4	1-136-230-00	s	FILM 0.0022 3% 100V
C5	1-136-257-00	s	FILM 0.0039 3% 100V
C6	1-131-345-00	s	TANTALUM 0.47 10% 35V
C10	1-136-169-00	s	MYLAR 0.22 10% 50V
C11	1-136-163-00	s	MYLAR 0.068 10% 50V
C13	1-130-339-00	s	FILM 0.0056 3% 100V
C103	1-136-230-00	s	FILM 0.0022 3% 100V
C104	1-136-230-00	s	FILM 0.0022 3% 100V
C105	1-136-257-00	s	FILM 0.0039 3% 100V
C106	1-131-345-00	s	TANTALUM 0.47 10% 35V
C110	1-136-169-00	s	MYLAR 0.22 10% 50V
C111	1-136-163-00	s	MYLAR 0.068 10% 50V
C113	1-130-339-00	s	FILM 0.0056 3% 100V
C201	1-131-372-00	s	TANTALUM 15 10% 16V
C202	1-131-363-00	s	TANTALUM 4.7 10% 16V
C203	1-136-164-00	s	MYLAR 0.082 10% 50V
C204	1-131-372-00	s	TANTALUM 15 10% 16V
C205	1-131-363-00	s	TANTALUM 4.7 10% 16V
C206	1-136-153-00	s	MYLAR 0.01 10% 50V

Ref No.	Parts No.	SP	Description
C207	1-136-164-00	s	MYLAR 0.082 10% 50V
C301	1-131-404-00	s	ELECT (SOLID) 0.22 10% 25V
C303	1-131-372-00	s	TANTALUM 15 10% 16V
C306	1-131-372-00	s	TANTALUM 15 10% 16V
C308	1-136-164-00	s	MYLAR 0.082 10% 50V
C309	1-136-164-00	s	MYLAR 0.082 10% 50V
C310	1-136-168-00	s	MYLAR 0.18 10% 50V
C311	1-136-168-00	s	MYLAR 0.18 10% 50V
C312	1-136-168-00	s	MYLAR 0.18 10% 50V
C313	1-136-168-00	s	MYLAR 0.18 10% 50V
C314	1-130-519-00	s	MYLAR 0.018 10% 50V
C315	1-130-519-00	s	MYLAR 0.018 10% 50V
C316	1-136-153-00	s	MYLAR 0.01 10% 50V
C317	1-136-153-00	s	MYLAR 0.01 10% 50V
C352	1-136-153-00	s	MYLAR 0.01 10% 50V
CN252	1-506-821-11	o	HOUSING, BOARD IN CONNECTOR 12P
CN251	1-562-739-11	o	HOUSING, CONNECTOR 6P
CN253	1-506-821-11	o	HOUSING, BOARD IN CONNECTOR 12P
	1-563-186-11	o	HOUSING, CONNECTOR 12P
CP1	1-236-010-11	s	FILTER, LOW PASS
CP101	1-236-010-11	s	FILTER, LOW PASS
D201	8-719-109-91	s	RD6.2ESB
D202	8-719-911-10	s	1SS119
D206	8-719-911-10	s	1SS119
D301	8-719-911-19	s	1SS119
D302	8-719-911-19	s	1SS119
D303	8-719-911-19	s	1SS119
D304	8-719-911-19	s	1SS119
D305	8-719-911-19	s	1SS119
D306	8-719-911-19	s	1SS119
D307	8-719-109-91	s	RD6.2ESB
IC1	8-752-018-80	s	CX20188 (SONY)
IC201	8-759-205-76	s	TC504013BP (TOSHIBA)
IC202	8-759-705-58	s	NJM4558D-D (JRC)
IC203	8-759-240-71	s	TC4071BP (TOSHIBA)
IC204	8-759-240-11	s	TC4011BP (TOSHIBA)
IC205	8-759-240-11	s	TC4011BP (TOSHIBA)
IC301	8-759-132-40	s	UPC324C (NEC)
IC302	8-759-132-40	s	UPC324C (NEC)
IC303	8-759-969-13	s	SN16913P (TI)
IC304	8-759-969-13	s	SN16913P (TI)
IC305	8-759-969-13	s	SN16913P (TI)
IC306	8-759-969-13	s	SN16913P (TI)

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

AU-89A, CC-31, CC-32, CC-33, CO-7A

Ref No.	Parts No.	SP	Description
Q201	8-729-900-89	s	DTC144ES
Q204	8-729-178-55	s	2SC2785-E
Q206	8-729-900-65	s	DTA144ES
Q208	8-729-900-65	s	DTA144ES
Q306	8-729-117-54	s	2SA1175-K
Q307	8-729-117-54	s	2SA1175-K
Q308	8-729-117-54	s	2SA1175-K
Q309	8-729-117-54	s	2SA1175-K
R209	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R231	1-247-887-00	s	CARBON 220k 5% 1/4W
R301	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R318	1-247-885-00	s	CARBON 180k 5% 1/4W
R319	1-247-885-00	s	CARBON 180k 5% 1/4W
R322	1-247-895-00	s	CARBON 470k 5% 1/4W
R323	1-247-895-00	s	CARBON 470k 5% 1/4W
R324	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R325	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R326	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R327	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R330	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R331	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R332	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R333	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R338	1-247-869-00	s	CARBON 39k 5% 1/4W
R339	1-247-881-00	s	CARBON 120k 5% 1/4W
R340	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R343	1-247-887-00	s	CARBON 220k 5% 1/4W
RV11	1-230-722-11	s	VAR, CARBON 22k
RV111	1-230-722-11	s	VAR, CARBON 22k
RV312	1-230-725-11	s	VAR, CARBON 220k
RV313	1-230-722-11	s	VAR, CARBON 22k
RV314	1-230-722-11	s	VAR, CARBON 22k
RV315	1-230-718-11	s	VAR, CARBON 1k
RV316	1-230-718-11	s	VAR, CARBON 1k
RV317	1-230-722-11	s	VAR, CARBON 22k

Ref No.	Parts No.	SP	Description
CC-31 BOARD			
	1-622-255-11	o	PRINTED CIRCUIT BOARD, CC-31
CC-32 BOARD			
	1-622-256-11	o	PRINTED CIRCUIT BOARD, CC-32
IC1	8-719-940-86	s	GP1L53 "CASSETTE IN DET"
CC-33 BOARD			
	1-622-257-11	o	PRINTED CIRCUIT BOARD, CC-33
IC1	8-719-940-86	s	GP1L53 "CASSETTE DOWN DET"
CO-7A BOARD			
	A-6711-841-A	o	MOUNTED CIRCUIT BOARD, CO-7A
C1	1-126-103-11	s	ELECT 470 20% 16V
C3	1-124-236-00	s	ELECT 47 20% 16V
C6	1-124-462-00	s	ELECT 10 20% 10V
C9	1-124-236-00	s	ELECT 47 20% 16V
C15	1-131-344-00	s	TANTALUM 0.33 10% 35V
C22	1-131-344-00	s	TANTALUM 0.33 10% 35V
C23	1-124-584-00	s	ELECT 100 20% 10V
1) C28	1-107-166-00	s	MICA 62PF 5% 500V
2) C28	1-101-886-00	s	CERAMIC 62PF 5% 50V
C32	1-124-255-00	s	ELECT 1 20% 50V
C34	1-124-236-00	s	ELECT 47 20% 16V
1) C36	1-124-245-00	s	ELECT 4.7 20% 16V
2) C36	1-131-351-00	s	TANTALUM 4.7 10% 35V
1) C38	1-124-464-11	s	ELECT 22 20% 50V
2) C38	1-131-343-00	s	TANTALUM 0.22 10% 35V
C39	1-124-236-00	s	ELECT 47 20% 16V
C70	1-124-462-00	s	ELECT 10 20% 16V
C77	1-124-462-00	s	ELECT 10 20% 16V
C78	1-124-255-00	s	ELECT 1 20% 50V
C80	1-124-236-00	s	ELECT 47 20% 16V
C81	1-124-584-00	s	ELECT 100 20% 10V
C82	1-124-236-00	s	ELECT 47 20% 16V
C84	1-124-462-00	s	ELECT 10 20% 16V
C88	1-124-462-00	s	ELECT 10 20% 16V
C89	1-124-462-00	s	ELECT 10 20% 10V
C91	1-124-255-00	s	ELECT 1 20% 50V
C94	1-124-255-00	s	ELECT 1 20% 50V
C96	1-124-462-00	s	ELECT 10 20% 10V
C98	1-124-234-00	s	ELECT 22 20% 16V
C99	1-124-236-00	s	ELECT 47 20% 16V

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
C102	1-124-257-00	s	ELECT 2.2 20% 50V
C110	1-124-255-00	s	ELECT 1 20% 50V
C119	1-131-349-00	s	TANTALUM 2.2 10% 25V
C120	1-131-379-00	s	TANTALUM 22 10% 10V
C121	1-131-379-00	s	TANTALUM 22 10% 10V
C122	1-131-349-00	s	TANTALUM 2.2 10% 35V
C123	1-131-349-00	s	TANTALUM 2.2 10% 35V
C124	1-124-462-00	s	ELECT 10 20% 10V
C125	1-162-289-31	s	CERAMIC 390PF 10% 50V
C126	1-124-584-00	s	ELECT 100 20% 10V
C127	1-124-255-00	s	ELECT 1 20% 50V
C505	1-109-543-00	s	MICA 240P 5% 50V
C516	1-124-462-00	s	ELECT 10 20% 10V
C524	1-163-033-00	s	CERAMIC CHIP 0.022 10% 25V
C528	1-126-101-11	s	ELECT 100 20% 16V
C541	1-124-462-00	s	ELECT 10 20% 10V
C543	1-124-236-00	s	ELECT 47 20% 16V
2) C701	1-163-033-00	s	CERAMIC CHIP 0.022 10% 25V
CT100	1-141-227-00	s	CERAMIC TRIMMER
D1	8-719-100-05	s	1S2837
D3	8-719-100-05	s	1S2837
D4	8-719-100-05	s	1S2837
D5	8-719-815-59	s	1S1555-S
D6	8-719-815-59	s	1S1555-S
D7	8-719-100-05	s	1S2837
D8	8-719-100-05	s	1S2837
D9	8-719-100-05	s	1S2837
2) D11	8-719-104-10	s	1SS99
D14	8-719-100-05	s	1S2837
D16	8-719-100-05	s	1S2837
D17	8-719-911-19	s	1SS119
D18	8-719-100-05	s	1S2837
D101	8-719-100-05	s	1S2837
D102	8-719-915-43	s	FC54M
D104	8-719-100-05	s	1S2837
D105	8-719-100-03	s	1S2835
D106	8-719-100-05	s	1S2837
D107	8-719-100-03	s	1S2835
5) D200	8-719-911-19	s	1SS119
6) D201	8-719-101-23	s	1SS123
FL1	1-235-470-11	s	LOW PASS
FL2	1-236-029-11	s	BAND PASS
IC1	8-759-908-59	s	CX859 (SONY)
IC2	8-741-126-20	s	BX1262 (SONY)
IC5	8-741-126-40	s	BX1264 (SONY)
IC9	8-749-938-90	s	BX389 (SONY)
IC10	8-752-006-10	s	CX20061 (SONY)
IC12	8-752-006-10	s	CX20061 (SONY)
IC13	8-752-006-10	s	CX20061 (SONY)
IC14	8-759-200-60	s	TA7060AP (TOSHIBA)
IC15	8-759-240-69	s	TC4069UBP (TOSHIBA)
IC16	8-750-000-46	s	CX872 (SONY)

Ref No.	Parts No.	SP	Description
IC19	8-759-240-01	s	TC4001BP (TOSHIBA)
IC20	8-759-240-01	s	TC4001BP (TOSHIBA)
L1	1-410-482-31	s	MICRO 100UH
L3	1-410-482-31	s	MICRO 100UH
L5	1-410-489-11	s	MICRO 390UH
3) L6	1-408-411-00	s	MICRO 15UH
4) L6	1-410-476-11	s	MICRO 33UH
L7	1-410-482-31	s	MICRO 100UH
L8	1-410-093-11	s	MICRO 33MMH
1) L17	1-408-413-00	s	MICRO 22UH
2) L17	1-410-478-11	s	MICRO 47UH
L18	1-410-471-11	s	MICRO 12UH
L19	1-410-482-31	s	MICRO 100UH
L23	1-410-494-11	s	MICRO 1MMH
1) L25	1-408-414-00	s	MICRO 27UH
2) L25	1-410-478-11	s	MICRO 47UH
L26	1-410-482-31	s	MICRO 100UH
L31	1-410-478-11	s	MICRO 47UH
L33	1-410-478-11	s	MICRO 47UH
L34	1-410-482-31	s	MICRO 100UH
L102	1-410-476-11	s	MICRO 33UH
L106	1-410-482-31	s	MICRO 100UH
2) L200	1-410-471-11	s	MICRO 12UH
LV2	1-425-982-00	s	VAR, BPT
LV3	1-411-106-00	s	VAR, TUNING
LV4	1-425-880-21	s	VAR, BURST AMP
Q3	8-729-201-05	s	2SC2878-B
Q4	8-729-100-67	s	2SC1623-L7
Q5	8-729-901-01	s	DTC144EK
Q6	8-729-901-01	s	DTC144EK
Q7	8-729-100-67	s	2SC1623-L7
Q9	8-729-216-21	s	2SA1162Y
Q10	8-729-901-01	s	DTC144EK
Q11	8-729-901-01	s	DTC144EK
Q13	8-729-901-01	s	DTC144EK
Q15	8-729-901-01	s	DTC144EK
Q19	8-729-201-05	s	2SC2878-B
Q35	8-729-100-67	s	2SC1623-L7
Q36	8-729-100-67	s	2SC1623-L7
Q37	8-729-100-67	s	2SC1623-L7
Q38	8-729-201-05	s	2SC2878-B
Q40	8-729-100-67	s	2SC1623-L7
Q42	8-729-201-05	s	2SC2878-B
Q43	8-729-100-67	s	2SC1623-L7
Q46	8-729-100-67	s	2SC1623-L7
Q47	8-729-100-67	s	2SC1623-L7
Q48	8-729-100-67	s	2SC1623-L7
Q49	8-729-201-05	s	2SC2878-B
Q50	8-729-201-05	s	2SC2878-B
Q51	8-729-216-21	s	2SA1162Y
Q52	8-729-216-21	s	2SA1162Y

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
Q54	8-729-216-21	s	2SA1162Y
Q55	8-729-216-21	s	2SA1162Y
Q57	8-729-100-67	s	2SC1623-L7
Q58	8-729-201-05	s	2SC2878-B
Q60	8-729-100-67	s	2SC1623-L7
Q61	8-729-201-05	s	2SC2878-B
Q62	8-729-201-05	s	2SC2878-B
Q64	8-729-100-67	s	2SC1623-L7
Q65	8-729-201-05	s	2SC2878-B
Q100	8-729-100-67	s	2SC1623-L7
Q101	8-729-100-67	s	2SC1623-L7
Q102	8-729-100-67	s	2SC1623-L7
Q106	8-729-201-05	s	2SC2878-B
Q108	8-729-100-67	s	2SC1623-L7
Q113	8-729-201-05	s	2SC2878-B
Q114	8-729-901-01	s	DTC144EK
Q116	8-729-100-67	s	2SC1623-L7
Q117	8-729-901-01	s	DTC144EK
Q118	8-729-201-05	s	2SC2878-B
Q119	8-729-901-01	s	DTC144EK
Q120	8-729-100-67	s	2SC1623-L7
Q130	8-729-100-67	s	2SC1623-L7
Q132	8-729-201-05	s	2SC2878-B
Q133	8-729-201-05	s	2SC2878-B
Q134	8-729-216-21	s	2SA1162Y
Q135	8-729-216-21	s	2SA1162Y
Q136	8-729-100-67	s	2SC1623-L7
Q137	8-729-201-05	s	2SC2878-B
Q138	8-729-901-01	s	DTC144EK
Q139	8-729-901-01	s	DTC144EK
Q141	8-729-100-67	s	2SC1623-L7
Q142	8-729-901-01	s	DTC144EK
Q144	8-729-901-01	s	DTC144EK
Q145	8-729-216-21	s	2SA1162Y
Q146	8-729-100-67	s	2SC1623-L7
Q147	8-729-100-67	s	2SC1623-L7
Q148	8-729-100-67	s	2SC1623-L7
R173	1-247-849-00	s	CARBON 5.6k 5% 1/4W
RV3	1-228-989-00	s	VAR, CARBON 470
RV4	1-228-996-00	s	VAR, CARBON 47k
RV6	1-228-994-00	s	VAR, CARBON 10k
RV7	1-228-994-00	s	VAR, CARBON 10k
RV8	1-228-995-00	s	VAR, CARBON 22k
RV9	1-228-994-00	s	VAR, CARBON 10k
RV10	1-228-995-00	s	VAR, CARBON 22k
RV11	1-228-993-00	s	VAR, CARBON 4.7k
RV13	1-228-990-00	s	VAR, CARBON 1k
RV14	1-228-990-00	s	VAR, CARBON 1k
RV16	1-228-990-00	s	VAR, CARBON 1k
RV17	1-228-990-00	s	VAR, CARBON 1k
RV18	1-228-995-00	s	VAR, CARBON 22k
RV21	1-228-993-00	s	VAR, CARBON 4.7k
RV22	1-228-998-00	s	VAR, CARBON 220k

Ref No.	Parts No.	SP	Description
RV23	1-228-991-00	s	VAR, CARBON 2.2k
RV24	1-228-993-00	s	VAR, CARBON 4.7k
RV25	1-228-990-00	s	VAR, CARBON 1k
RV100	1-228-994-00	s	VAR, CARBON 10k
RV102	1-228-999-00	s	VAR, CARBON 470k
RV103	1-228-993-00	s	VAR, CARBON 4.7k
RV104	1-228-993-00	s	VAR, CARBON 4.7k
RV105	1-228-997-00	s	VAR, CARBON 100k
RV106	1-228-997-00	s	VAR, CARBON 100k
RV107	1-228-996-00	s	VAR, CARBON 47k
X1	1-527-231-00	s	CRYSTAL 4.433618 MHz

CP-112A BOARD

Ref No.	Parts No.	SP	Description
	A-6713-282-A	o	MOUNTED CIRCUIT BOARD, CP-112A
C7	1-162-207-31	s	CERAMIC 22PF 5% 50V
C12	1-162-207-31	s	CERAMIC 22PF 5% 50V
IC1	8-759-802-47	s	IC LA4500 (SANYO)
Q1	8-729-201-05	s	2SC2878-B
Q2	8-729-201-05	s	2SC2878-B

DC-31A BOARD

Ref No.	Parts No.	SP	Description
	1-622-221-21	o	PRINTED CIRCUIT BOARD, DC-31A
	1-533-189-11	o	HOLDER, FUSE
	1-561-432-00	o	CONNECTOR CONTACT
	1-561-424-00	o	SOCKET, CONNECTOR 5P
C2	1-161-379-00	s	CERAMIC 0.01 20% 16V
CN005	1-562-738-11	o	HOUSING, CONNECTOR 5P
⚠F1	1-532-237-00	s	FUSE, TIME LAG 3.15A 250V
F2	1-532-286-00	s	FUSE, TIME LAG 2.5A 250V
IC1	8-759-938-15	s	IC BA178M05

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DUS-92 BOARD

Ref No.	Parts No.	SP	Description
	1-615-924-11	o	PRINTED CIRCUIT BOARD, DUS-92
H1003	8-825-578-41	s	AUDIO HEAD (PS264-5803)

DUS-147 BOARD

Ref No.	Parts No.	SP	Description
	1-622-261-11	o	PRINTED CIRCUIT BOARD, DUS-147

EC-28 BOARD

Ref No.	Parts No.	SP	Description
	1-622-223-11	o	PRINTED CIRCUIT BOARD, EC-28
H1002	8-825-514-20	s	CTL HEAD (PP170-58)

HP-30 BOARD

Ref No.	Parts No.	SP	Description
	1-622-220-11	o	PRINTED CIRCUIT BOARD, HP-30
CN1013	1-507-854-00	s	JACK, LARGE TYPE "HEADPHONES"
RV1001	1-237-703-11	s	VAR, CARBON 2k/2k "HEADPHONES LEVEL"

IF-132 BOARD

Ref No.	Parts No.	SP	Description
	5) A-6717-450-A	o	MOUNTED CIRCUIT BOARD, IF-132
	6) A-6717-450-B	o	MOUNTED CIRCUIT BOARD, IF-132
C2	1-161-021-11	s	CERAMIC 0.047 10% 25V
C4	1-161-021-11	s	CERAMIC 0.047 10% 25V
C6	1-162-290-31	s	CERAMIC 470PF 10% 50V
C7	1-161-013-00	s	CERAMIC 0.01 10% 25V
C9	1-162-290-31	s	CERAMIC 470PF 10% 50V
5) C10	1-162-290-31	s	CERAMIC 470PF 10% 50V
C12	1-161-013-00	s	CERAMIC 0.01 10% 25V
C13	1-161-013-00	s	CERAMIC 0.01 10% 25V
C14	1-161-013-00	s	CERAMIC 0.01 10% 25V
C15	1-162-211-31	s	CERAMIC 33PF 5% 50V
C16	1-162-211-31	s	CERAMIC 33PF 5% 50V
C17	1-161-043-00	s	CERAMIC 0.0022 10% 25V
C18	1-161-379-00	s	CERAMIC 0.01 30% 16V
C19	1-161-379-00	s	CERAMIC 0.01 30% 16V
C20	1-161-379-00	s	CERAMIC 0.01 30% 16V
C21	1-161-379-00	s	CERAMIC 0.01 30% 16V
C22	1-161-379-00	s	CERAMIC 0.01 30% 16V
C23	1-161-379-00	s	CERAMIC 0.01 30% 16V
C24	1-161-379-00	s	CERAMIC 0.01 30% 16V
C26	1-162-294-31	s	CERAMIC 0.001 10% 50V
CN1021	1-566-615-11	s	CONNECTOR, SQUARE 33P "REMOTE"
CN1022	1-562-900-11	s	JACK (SMALL TYPE) "RX DATA"
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D7	8-719-911-19	s	1SS119
D8	8-719-911-19	s	1SS119
D9	8-719-911-19	s	1SS119
D10	8-719-911-19	s	1SS119
D11	8-719-911-19	s	1SS119
D12	8-719-911-19	s	1SS119
D13	8-719-911-19	s	1SS119
D14	8-719-911-19	s	1SS119
D15	8-719-911-19	s	1SS119
D16	8-719-911-19	s	1SS119
5) D17	8-719-911-19	s	1SS119
5) D18	8-719-911-19	s	1SS119
D19	8-719-911-19	s	1SS119
D20	8-719-911-19	s	1SS119
D21	8-719-911-19	s	1SS119
5) D22	8-719-911-19	s	1SS119
6) D23	8-719-911-19	s	1SS119
6) D24	8-719-911-19	s	1SS119
6) D25	8-719-911-19	s	1SS119
6) D26	8-719-911-19	s	1SS119
IC1	8-759-600-61	s	M54529AP (MITSUBISHI)
IC2	8-759-600-61	s	M54529AP (MITSUBISHI)
IC3	8-759-600-61	s	M54529AP (MITSUBISHI)
IC4	8-759-600-61	s	M54529AP (MITSUBISHI)
IC5	8-759-345-38	s	HD14538BP (HITACHI)
IC6	8-759-207-73	s	TC4030BPHB (TOSHIBA)
IC7	8-759-240-69	s	TC4069UBP (TOSHIBA)
IC8	8-759-971-32	s	MB88525-189M (FUJITSU)
Q1	8-729-900-89	s	DTC144ES
Q2	8-729-900-89	s	DTC144ES
Q3	8-729-900-89	s	DTC144ES
Q4	8-729-900-89	s	DTC144ES
Q5	8-729-900-89	s	DTC144ES

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Ref No.	Parts No.	SP	Description
R11	1-247-895-00	s	CARBON 470k 5% 1/4W
R37	1-247-887-00	s	CARBON 220k 5% 1/4W
R62	1-247-891-00	s	CARBON 330k 5% 1/4W
R73	1-247-887-00	s	CARBON 220k 5% 1/4W
X1	1-567-143-00	s	CERAMIC, 6MHz

KY-105E BOARD

Ref No.	Parts No.	SP	Description
	A-6717-465-A	o	MOUNTED CIRCUIT BOARD, KY-105E
BT1	1-528-227-11	o	BATTERY, LITHIUM (CR-2032)
C1	1-162-211-31	s	CERAMIC 33PF 5% 50V
C2	1-162-211-31	s	CERAMIC 33PF 5% 50V
C4	1-161-021-11	s	CERAMIC 0.047 10% 25V
C7	1-162-286-31	s	CERAMIC 220PF 10% 50V
C8	1-162-286-31	s	CERAMIC 220PF 10% 50V
C9	1-162-286-31	s	CERAMIC 220PF 10% 50V
C10	1-162-286-31	s	CERAMIC 220PF 10% 50V
C11	1-162-286-31	s	CERAMIC 220PF 10% 50V
C12	1-161-021-11	s	CERAMIC 0.047 10% 25V
C13	1-125-443-11	s	ELECT 0.047 5.5V
CP1	1-560-914-00	s	CONNECTOR POST 2P
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D7	8-719-911-19	s	1SS119
D8	8-719-904-55	s	GL-5HD5
D10	8-719-911-19	s	1SS119
D11	8-719-802-11	s	TLUG154
D12	8-719-911-19	s	1SS119
D14	8-719-911-19	s	1SS119
D15	8-719-911-19	s	1SS119
D18	8-719-904-55	s	GL-5HD5
D21	8-719-904-55	s	GL-5HD5
D22	8-719-911-19	s	1SS119
D23	8-719-911-19	s	1SS119
D24	8-719-911-19	s	1SS119
D25	8-719-904-55	s	GL-5HD5
D26	8-719-911-19	s	1SS119
D27	8-719-802-11	s	TLUG154
D28	8-719-802-24	s	TLUY154
D29	8-719-802-24	s	TLUY154
D30	8-719-802-24	s	TLUY154
D31	8-719-802-11	s	TLUG154
5) D32	8-719-911-19	s	1SS119
5) D33	8-719-911-19	s	1SS119
D34	8-719-911-19	s	1SS119

Ref No.	Parts No.	SP	Description
IC1	8-759-645-17	s	M54517P (MITSUBISHI)
IC2	8-759-970-95	s	MB88525-191M (FUJITSU)
IC3	8-759-240-42	s	TC4042BP (TOSHIBA)
L1	1-407-488-00	s	470uH
ND701	1-807-441-21	s	LED BLOCK
Q1	8-729-900-65	s	DTA144ES
Q2	8-729-900-65	s	DTA144ES
Q3	8-729-900-65	s	DTA144ES
Q4	8-729-900-65	s	DTA144ES
Q5	8-729-900-65	s	DTA144ES
Q6	8-729-900-65	s	DTA144ES
Q7	8-729-117-54	s	2SA1175
Q8	8-729-117-54	s	2SA1175
Q9	8-729-117-54	s	2SA1175
Q10	8-729-117-54	s	2SA1175
Q11	8-729-117-54	s	2SA1175
Q13	8-729-117-54	s	2SA1175
Q14	8-729-117-54	s	2SA1175
Q16	8-729-900-65	s	DTA144ES
Q19	8-729-900-65	s	DTA144ES
Q20	8-729-900-65	s	DTA144ES
Q21	8-729-900-65	s	DTA144ES
Q22	8-729-900-65	s	DTA144ES
Q23	8-729-900-65	s	DTA144ES
Q24	8-729-900-65	s	DTA144ES
Q30	8-729-900-36	s	DTC124ES
6) Q40	8-729-201-05	s	2SC2878-B
6) Q41	8-729-201-05	s	2SC2878-B
R75	1-247-736-11	s	CARBON 56 5% 1/2W
S1	1-570-145-11	s	LEVER SLIDE "FRAME/CTL"
S2	1-553-739-21	s	KEY "RESET"
S4	1-553-739-21	s	KEY "MARK A"
S5	1-553-739-21	s	KEY "MARK B"
S6	1-552-539-00	s	KEY "SEARCH"
S7	1-516-995-00	s	LEVER SLIDE "PROGRAM OPERATION"
S8	1-552-539-00	s	KEY "PAUSE"
S10	1-552-539-00	s	KEY "FF"
S12	1-552-539-00	s	KEY "PLAY"
S13	1-552-539-00	s	KEY "REW"
S14	1-552-539-00	s	KEY "EJECT"
S15	1-552-539-00	s	KEY "STOP"
S18	1-516-298-00	s	LEVER SLIDE "AUDIO MONITOR"
X1	1-567-143-00	s	CERAMIC, 6MHz

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Ref No.	Parts No.	SP	Description
LM-13 BOARD			
	1-618-600-11	o	PRINTED CIRCUIT BOARD, LM-13
C1	1-130-471-00	s	PE TEREPHTHALATE 0.001 5% 50V
C2	1-130-471-00	s	PE TEREPHTHALATE 0.001 5% 50V
M1003	1-541-376-11	s	DC (DNR-4700A) "THREADING"
LP-41 BOARD			
	1-623-101-11	o	PRINTED CIRCUIT BOARD, LP-41
D1	8-719-800-89	s	TLY255
D2	8-719-800-89	s	TLY255
D3	8-719-800-89	s	TLY255
R1	1-247-706-11	s	CARBON 330 5% 1/4W
R2	1-247-706-11	s	CARBON 330 5% 1/4W
R3	1-247-706-11	s	CARBON 330 5% 1/4W
PD-40A BOARD			
	A-6725-571-A	o	MOUNTED CIRCUIT BOARD, PD-40A
D1	8-719-200-02	s	10E-2
D2	8-719-200-02	s	10E-2
D3	8-719-200-02	s	10E-2
D4	8-719-200-02	s	10E-2
D5	8-719-200-02	s	10E-2
D6	8-719-200-02	s	10E-2
D7	8-719-200-02	s	10E-2
D8	8-719-200-02	s	10E-2
D10	8-719-200-02	s	10E-2
D11	8-719-200-02	s	10E-2
D12	8-719-200-02	s	10E-2
D13	8-719-200-02	s	10E-2
Q1	8-729-811-11	s	2SD1111
Q2	8-729-178-55	s	2SC2785-E
Q3	8-729-889-40	s	2SD894
Q4	8-729-811-11	s	2SD1111
Q5	8-729-178-55	s	2SC2785-E
Q6	8-729-889-40	s	2SD894
Q8	8-729-811-11	s	2SD1111
Q9	8-729-178-55	s	2SC2785-E
Q10	8-729-889-40	s	2SD894
Q11	8-729-811-11	s	2SD1111
Q12	8-729-178-55	s	2SC2785-E
Q13	8-729-178-55	s	2SC2785-E
Q14	8-729-889-40	s	2SD894
⚠R6	1-532-685-00	s	LINK, IC
R12	1-532-685-00	s	LINK, IC
R19	1-532-685-00	s	LINK, IC
R25	1-532-685-00	s	LINK, IC
PD-41 BOARD			
	A-6725-570-A	o	MOUNTED CIRCUIT BOARD, PD-41
D1	8-719-200-02	s	10E-2
D2	8-719-200-02	s	10E-2
D3	8-719-200-02	s	10E-2
D4	8-719-200-02	s	10E-2
D5	8-719-200-02	s	10E-2
D6	8-719-200-02	s	10E-2
Q1	8-729-811-11	s	2SD1111
Q2	8-729-178-55	s	2SC2785-E
Q3	8-729-889-40	s	2SD894
Q4	8-729-811-11	s	2SD1111
Q5	8-729-178-55	s	2SC2785-E
Q6	8-729-889-40	s	2SD894
⚠R6	1-532-685-00	s	LINK, IC
R12	1-532-685-00	s	LINK, IC
PH-5 BOARD			
	1-603-737-00	o	PRINTED CIRCUIT BOARD, PH-5
D1	8-719-951-04	s	BR5104S
Q1	8-729-810-22	s	SPS102
PT-9 BOARD			
	1-605-018-00	o	PRINTED CIRCUIT BOARD, PT-9
Q1	8-729-377-13	s	2SA771-Y

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

PTC-30 BOARD

Ref No.	Parts No.	SP	Description
	1-622-260-11	o	PRINTED CIRCUIT BOARD, PTC-30
IC1	8-719-939-50	s	GP1L52
IC3	8-719-939-50	s	GP1L52

PTC-33 BOARD

Ref No.	Parts No.	SP	Description
	1-622-258-11	o	PRINTED CIRCUIT BOARD, PTC-33
IC1	8-719-940-86	s	GP1L53 "THREAD END DET"
IC2	8-719-940-86	s	GP1L53 "UNTHREAD END DET"

PTC-34 BOARD

Ref No.	Parts No.	SP	Description
	1-622-259-11	o	PRINTED CIRCUIT BOARD, PTC-34
IC1	8-719-940-86	s	GP1L53 "FR UNTHREAD END DET"

PTC-35 BOARD

Ref No.	Parts No.	SP	Description
	1-622-218-11	o	PRINTED CIRCUIT BOARD, PTC-35
IC1A	8-719-940-86	s	GP1L53 "TAKE-UP ROTATION DET"
IC1B	8-719-940-86	s	GP1L53 "SUPPLY ROTATION DET"

RM-39 BOARD

Ref No.	Parts No.	SP	Description
	1-618-873-11	o	PRINTED CIRCUIT BOARD, RM-39
C1	1-101-006-00	s	CERAMIC 0.047 50V
C2	1-101-006-00	s	CERAMIC 0.047 50V
L1	1-410-623-11	s	4.7uH
L2	1-410-623-11	s	4.7uH
M1006	8-835-178-01	s	DC FN30-T26N1E "REEL"

RP-35A BOARD

Ref No.	Parts No.	SP	Description
	A-6711-863-A	o	MOUNTED CIRCUIT BOARD, RP-35A
C2	1-124-236-00	s	ELECT 47 20% 16V
C10	1-161-021-11	s	CERAMIC 0.047 10% 25V
C11	1-124-236-00	s	ELECT 47 20% 16V
C14	1-124-255-00	s	ELECT 1 20% 50V
C16	1-161-021-11	s	CERAMIC 0.047 10% 25V
C17	1-124-236-00	s	ELECT 47 20% 16V
C20	1-124-255-00	s	ELECT 1 20% 50V
CP1	1-560-914-00	s	POST, 2P
CP2	1-560-914-00	s	POST, 2P
CS1	1-561-724-00	o	SOCKET, 2P
CS2	1-561-724-00	o	SOCKET, 2P
IC3	8-749-901-08	s	BX1265 (SONY)
IC6	8-749-901-08	s	BX1265 (SONY)
L3	1-410-482-31	s	MICRO 100UH
L4	1-410-482-31	s	MICRO 100UH
Q3	8-729-600-24	s	2SC403SP
Q5	8-729-600-24	s	2SC403SP
RV4	1-228-991-00	s	VAR, CARBON 2.2k
RV6	1-228-991-00	s	VAR, CARBON 2.2k
T3	1-426-319-11	s	PB RF
T5	1-426-319-11	s	PB RF

SE-46 BOARD

Ref No.	Parts No.	SP	Description
	1-618-599-11	o	PRINTED CIRCUIT BOARD, SE-46
PC1	1-806-232-21	s	DETECTOR MB-1102/S.N

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

SV-93E BOARD

Ref No.	Parts No.	SP	Description
	A-6715-375-A	o	MOUNTED CIRCUIT BOARD, SV-93E
C3	1-124-499-11	s	ELECT 1 20% 50V
C6	1-161-377-00	s	CERAMIC 0.0047 30% 16V
C7	1-161-374-11	s	CERAMIC 0.0015 30% 16V
C8	1-130-493-00	s	MYLAR 0.068 5% 50V
C10	1-131-352-00	s	TANTALUM 6.8 10% 35V
C12	1-162-299-21	s	CERAMIC 0.0068 30% 16V
C14	1-161-021-11	s	CERAMIC 0.047 10% 25V
C17	1-161-057-00	s	CERAMIC 0.033 10% 25V
C18	1-161-013-00	s	CERAMIC 0.01 10% 25V
C19	1-161-013-00	s	CERAMIC 0.01 10% 25V
C104	1-162-215-31	s	CERAMIC 47PF 5% 50V
C106	1-161-047-00	s	CERAMIC 0.0047 10% 25V
C111	1-161-042-00	s	CERAMIC 0.0018 10% 25V
C112	1-161-042-00	s	CERAMIC 0.0018 10% 25V
C116	1-162-286-31	s	CERAMIC 220PF 10% 50V
C120	1-162-288-31	s	CERAMIC 330PF 10% 50V
C203	1-162-211-31	s	CERAMIC 33PF 5% 50V
C204	1-162-211-31	s	CERAMIC 33PF 5% 50V
C301	1-161-013-00	s	CERAMIC 0.01 10% 25V
C302	1-161-040-00	s	CERAMIC 0.0012 10% 25V
C303	1-130-483-00	s	MYLAR 0.01 5% 50V
C306	1-162-286-31	s	CERAMIC 220PF 10% 50V
C307	1-162-288-31	s	CERAMIC 330PF 10% 50V
C308	1-161-013-00	s	CERAMIC 0.01 10% 25V
C309	1-161-013-00	s	CERAMIC 0.01 10% 25V
C312	1-124-499-11	s	ELECT 1 20% 50V
C409	1-161-379-00	s	CERAMIC 0.01 30% 16V
C410	1-161-379-00	s	CERAMIC 0.01 30% 16V
C411	1-162-207-31	s	CERAMIC 22PF 5% 50V
C412	1-162-282-31	s	CERAMIC 100PF 10% 50V
C413	1-162-284-31	s	CERAMIC 150PF 10% 50V
C418	1-162-282-31	s	CERAMIC 100PF 10% 50V
C422	1-124-464-11	s	ELECT 0.22 20% 50V
C423	1-162-289-31	s	CERAMIC 390PF 10% 50V
C430	1-124-463-00	s	ELECT 0.1 20% 50V
C433	1-124-499-11	s	ELECT 1 20% 50V
C507	1-162-286-31	s	CERAMIC 220PF 10% 50V
C702	1-161-379-00	s	CERAMIC 0.01 30% 16V
C703	1-161-379-00	s	CERAMIC 0.01 30% 16V
C704	1-161-379-00	s	CERAMIC 0.01 30% 16V
C705	1-161-379-00	s	CERAMIC 0.01 30% 16V
C709	1-161-379-00	s	CERAMIC 0.01 30% 16V
C710	1-161-379-00	s	CERAMIC 0.01 30% 16V
C711	1-161-379-00	s	CERAMIC 0.01 30% 16V
C712	1-161-379-00	s	CERAMIC 0.01 30% 16V
C714	1-161-379-00	s	CERAMIC 0.01 30% 16V
C716	1-161-379-00	s	CERAMIC 0.01 30% 16V
C718	1-161-379-00	s	CERAMIC 0.01 30% 16V
C719	1-161-039-00	s	CERAMIC 0.001 10% 25V

Ref No.	Parts No.	SP	Description
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D7	8-719-911-55	s	U05G
D101	8-719-911-19	s	1SS119
D103	8-719-911-19	s	1SS119
D104	8-719-911-19	s	1SS119
D105	8-719-911-19	s	1SS119
D106	8-719-911-19	s	1SS119
D107	8-719-911-19	s	1SS119
D108	8-719-911-19	s	1SS119
D109	8-719-911-19	s	1SS119
D110	8-719-911-19	s	1SS119
D111	8-719-911-19	s	1SS119
D112	8-719-911-19	s	1SS119
D113	8-719-911-19	s	1SS119
D204	8-719-911-19	s	1SS119
D205	8-719-911-19	s	1SS119
D206	8-719-911-19	s	1SS119
D207	8-719-911-19	s	1SS119
D208	8-719-911-19	s	1SS119
D210	8-719-100-15	s	RD3.0E-B2
D211	8-719-911-19	s	1SS119
D303	8-719-911-19	s	1SS119
D401	8-719-911-19	s	1SS119
D402	8-719-911-19	s	1SS119
D405	8-719-911-19	s	1SS119
D406	8-719-911-19	s	1SS119
D407	8-719-911-19	s	1SS119
D408	8-719-911-19	s	1SS119
D409	8-719-911-19	s	1SS119
D410	8-719-911-19	s	1SS119
D411	8-719-911-19	s	1SS119
D501	8-719-911-19	s	1SS119
D600	8-719-911-19	s	1SS119
IC1	8-759-132-40	s	UPC324C (NEC)
IC2	8-759-700-08	s	NJM4558S (JRC)
IC3	8-759-705-58	s	NJM4558D-D (JRC)
IC5	8-759-140-53	s	UPD4053BC (NEC)
IC8	8-759-132-40	s	UPC324C (NEC)
IC9	8-759-132-40	s	UPC324C (NEC)
IC10	8-759-133-90	s	UPC339C (NEC)
IC11	8-759-240-30	s	TC4030BP (TOSHIBA)
IC12	8-759-135-80	s	UPC358C (NEC)
IC13	8-759-140-53	s	UPD4053BC (NEC)
IC14	8-759-205-76	s	TC504013BP (TOSHIBA)
IC15	8-759-200-01	s	TC4001UBP (TOSHIBA)
IC17	8-751-941-05	s	CX-194B-5 (SONY)
IC18	8-759-945-41	s	MB88505-547M (FUJITSU)
IC19	8-759-240-30	s	TC4030BP (TOSHIBA)
IC20	8-759-140-53	s	UPD4053BC (NEC)
IC21	8-743-915-10	s	BX-3915A (SONY)
IC22	8-759-135-80	s	UPC358C (NEC)

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Ref No.	Parts No.	SP	Description
Q1	8-729-178-55	s	2SC2785-E
Q2	8-729-117-54	s	2SA1175-K
Q3	8-729-376-84	s	2SA768-G
Q4	8-729-804-91	s	2SD1682-S
Q5	8-729-177-43	s	2SD774-4
Q101	8-729-900-83	s	DTC124XS
Q102	8-729-178-55	s	2SC2785-E
Q103	8-729-900-83	s	DTC124XS
Q104	8-729-117-54	s	2SA1175-K
Q106	8-729-178-55	s	2SC2785-E
Q107	8-729-105-72	s	2SK523-L1
Q108	8-729-900-83	s	DTC124XS
Q109	8-729-900-89	s	DTC144ES
Q110	8-729-178-55	s	2SC2785-E
Q111	8-729-376-84	s	2SA768-G
Q112	8-729-117-54	s	2SA1175-K
Q113	8-729-804-91	s	2SD1682-S
Q114	8-729-900-67	s	DTA124XS
Q201	8-729-900-83	s	DTC124XS
Q202	8-729-900-83	s	DTC124XS
Q203	8-729-900-83	s	DTC124XS
Q204	8-729-900-83	s	DTC124XS
Q205	8-729-900-83	s	DTC124XS
Q206	8-729-900-83	s	DTC124XS
Q304	8-729-178-55	s	2SC2785-E
Q401	8-729-178-55	s	2SC2785
Q403	8-729-178-55	s	2SC2785
Q404	8-729-178-55	s	2SC2785
Q408	8-729-600-24	s	2SC403-51
Q411	8-729-178-55	s	2SC2785-E
Q412	8-729-178-55	s	2SC2785-E
R12	1-247-895-00	s	CARBON 470k 5% 1/4W
R13	1-247-881-00	s	CARBON 120k 5% 1/4W
R16	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R17	1-247-895-00	s	CARBON 470k 5% 1/4W
R36	1-247-887-00	s	CARBON 220k 5% 1/4W
⚠R42	1-207-621-00	s	WIREWOUND 1.5 10% 3W
R125	1-247-887-00	s	CARBON 220k 5% 1/4W
R147	1-247-895-00	s	CARBON 470k 5% 1/4W
R151	1-247-891-00	s	CARBON 330k 5% 1/4W
R162	1-247-895-00	s	CARBON 470k 5% 1/4W
R172	1-247-891-00	s	CARBON 330k 5% 1/4W
R176	1-247-887-00	s	CARBON 220k 5% 1/4W
R178	1-247-895-00	s	CARBON 470k 5% 1/4W
R260	1-247-895-00	s	CARBON 470k 5% 1/4W
R306	1-247-895-00	s	CARBON 470k 5% 1/4W
R311	1-247-895-00	s	CARBON 470k 5% 1/4W
⚠R461	1-207-636-00	s	WIREWOUND 100 10% 3W
R507	1-247-849-00	s	CARBON 5.6k 5% 1/4W
R600	1-532-685-00	s	LINK IC
RV1	1-228-994-00	s	VAR, METAL GLAZE 10k
RV2	1-228-990-00	s	VAR, CARBON 1k
RV100	1-228-994-00	s	VAR, METAL GLAZE 10k
RV101	1-228-994-00	s	VAR, METAL GLAZE 10k
RV102	1-228-994-00	s	VAR, METAL GLAZE 10k
RV106	1-228-993-00	s	VAR, CARBON 4.7k
RV107	1-228-995-00	s	vAR, CARBON 22k
RV201	1-228-990-00	s	VAR, CARBON 1k
RV402	1-228-996-00	s	VAR, CARBON 47k
RV404	1-228-996-00	s	VAR, CARBON 47k
RV405	1-228-996-00	s	VAR, CARBON 47k
RV406	1-228-997-00	s	VAR, CARBON 100k
X1	1-527-345-00	s	CRYSTAL 4.43MHz
X2	1-527-734-00	s	CRYSTAL 6MHz

SY-106A BOARD

Ref No.	Parts No.	SP	Description
⚠3)	A-6717-454-A	o	MOUNTED CIRCUIT BOARD, SY-106A
4)	A-6717-454-B	o	MOUNTED CIRCUIT BOARD, SY-106A
C2	1-161-021-11	s	CERAMIC 0.047 10% 25V
C3	1-161-013-00	s	CERAMIC 0.01 10% 25V
C4	1-161-041-00	s	CERAMIC 0.0015 10% 25V
C5	1-161-013-00	s	CERAMIC 0.01 10% 25V
C6	1-161-055-00	s	CERAMIC 0.022 10% 25V
C10	1-162-286-31	s	CERAMIC 220PF 10% 50V
C11	1-124-499-11	s	ELECT 1 20% 50V
C14	1-162-286-31	s	CERAMIC 220PF 10% 50V
C15	1-161-020-11	s	CERAMIC 0.039 10% 25V
C17	1-124-499-11	s	ELECT 1 20% 50V
C18	1-131-358-00	s	TANTALUM 6.8 10% 25V
C19	1-161-013-00	s	CERAMIC 0.01 10% 25V
C20	1-161-057-00	s	CERAMIC 0.033 10% 25V
C21	1-161-013-00	s	CERAMIC 0.01 10% 25V
C22	1-162-216-31	s	CERAMIC 51PF 5% 50V
C23	1-124-499-11	s	ELECT 1 20% 50V
C24	1-161-021-11	s	CERAMIC 0.047 10% 25V
C30	1-124-499-11	s	ELECT 1 20% 50V
C31	1-161-039-00	s	CERAMIC 0.001 10% 25V
C32	1-162-211-31	s	CERAMIC 33PF 5% 50V
C33	1-161-021-11	s	CERAMIC 0.047 10% 25V
C34	1-161-039-00	s	CERAMIC 0.001 10% 25V
C36	1-161-021-11	s	CERAMIC 0.047 10% 25V
C37	1-162-211-31	s	CERAMIC 33PF 5% 50V
C38	1-161-055-00	s	CERAMIC 0.022 10% 25V
C42	1-161-021-11	s	CERAMIC 0.047 10% 25V
C46	1-162-290-31	s	CERAMIC 470PF 10% 50V
C47	1-162-210-31	s	CERAMIC 30PF 5% 50V
C48	1-162-210-31	s	CERAMIC 30PF 5% 50V
C49	1-124-499-11	s	ELECT 1 20% 50V
C50	1-124-499-11	s	ELECT 1 20% 50V
C55	1-162-290-31	s	CERAMIC 470PF 10% 50V

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
CN505	1-506-815-11	o	HOUSING, BOARD IN CONNECTOR 6P
	1-563-180-11	o	HOUSING, CONNECTOR 6P
CN507	1-506-821-11	o	HOUSING, BOARD IN CONNECTOR 12P
	1-563-186-11	o	HOUSING, CONNECTOR 12P
CN508	1-506-821-11	o	HOUSING, BOARD IN CONNECTOR 12P
	1-563-186-11	o	HOUSING, CONNECTOR 12P
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D7	8-719-911-19	s	1SS119
D8	8-719-911-19	s	1SS119
D9	8-719-911-19	s	1SS119
D10	8-719-911-19	s	1SS119
D11	8-719-911-19	s	1SS119
D12	8-719-911-19	s	1SS119
D13	8-719-911-19	s	1SS119
D14	8-719-911-19	s	1SS119
D15	8-719-911-19	s	1SS119
D16	8-719-911-19	s	1SS119
D17	8-719-911-19	s	1SS119
D18	8-719-911-19	s	1SS119
D20	8-719-911-19	s	1SS119
D21	8-719-911-55	s	U05-G
D22	8-719-911-55	s	U05-G
D23	8-719-911-55	s	U05-G
D24	8-719-911-19	s	1SS119
D25	8-719-911-19	s	1SS119
D26	8-719-911-19	s	1SS119
4) D30	8-719-911-19	s	1SS119
D31	8-719-911-19	s	1SS119
D32	8-719-911-19	s	1SS119
D33	8-719-911-19	s	1SS119
4) D41	8-719-911-19	s	1SS119
4) D42	8-719-911-19	s	1SS119
D43	8-719-101-97	s	1SS97-1
IC1	8-759-145-58	s	UPC4558C (NEC)
IC2	8-759-145-58	s	UPC4558C (NEC)
IC3	8-759-345-38	s	HD14538BP (HITACHI)
IC4	8-759-135-80	s	UPC358C (NEC)
IC5	8-759-145-58	s	UPC4558C (NEC)
3) IC7	8-759-945-39	s	MB88525-177M (FUJITSU)
4) IC7	8-759-970-94	s	MB88525-184M (FUJITSU)
IC8	8-759-729-03	s	NJM2903D (JRC)
IC9	8-759-600-24	s	M54543L (MITSUBISHI)
IC10	8-759-600-24	s	M54543L (MITSUBISHI)
IC11	8-759-240-69	s	TC4069UBP (TOSHIBA)
3) IC12	8-759-945-43	s	MB88505-549M (FUJITSU)
4) IC12	8-759-970-93	s	MB88505-571M (FUJITSU)
IC13	8-759-220-00	s	TC40H000P (TOSHIBA)
IC14	8-759-913-99	s	MB88201-173N (FUJITSU)
IC15	8-759-729-03	s	NJM2903D (JRC)
IC17	8-759-240-01	s	TC4001BP (TOSHIBA)
IC18	8-759-240-69	s	TC4069UBP (TOSHIBA)
IC19	8-759-345-38	s	HD14538BP (HITACHI)
IC20	8-759-202-55	s	TC74HC244P (TOSHIBA)

Ref No.	Parts No.	SP	Description
Q1	8-729-177-43	s	2SD774-4
Q3	8-729-889-40	s	2SD894
Q4	8-729-178-55	s	2SC2785-E
Q5	8-729-178-55	s	2SC2785-E
Q6	8-729-178-55	s	2SC2785-E
Q7	8-729-178-55	s	2SC2785-E
Q8	8-729-178-55	s	2SC2785-E
Q9	8-729-900-89	s	DTC144ES
Q10	8-729-117-54	s	2SA1175-K
Q11	8-729-900-89	s	DTC144ES
Q12	8-729-175-54	s	2SA1175-K
Q13	8-729-900-89	s	DTC144ES
Q14	8-729-900-89	s	DTC144ES
Q15	8-729-178-55	s	2SC2785-E
Q16	8-729-178-55	s	2SC2785-E
Q17	8-729-900-89	s	DTC144ES
Q18	8-729-900-89	s	DTC144ES
Q19	8-729-900-89	s	DTC144ES
Q20	8-729-178-55	s	2SC2785-E
Q23	8-729-900-89	s	DTC144ES
Q24	8-729-900-89	s	DTC144ES
Q26	8-729-178-55	s	2SC2785-E
Q27	8-729-178-55	s	2SC2785-E
Q28	8-729-117-54	s	2SA1175-K
Q29	8-729-178-55	s	2SC2785-E
Q31	8-729-178-55	s	2SC2785-E
Q35	8-729-398-62	s	2SC1986
Q36	8-729-900-89	s	DTC144ES
Q37	8-729-900-89	s	DTC144ES
Q38	8-729-900-89	s	DTC144ES
Q41	8-729-900-89	s	DTC144ES
Q42	8-729-900-89	s	DTC144ES
Q43	8-729-900-89	s	DTC144ES
Q44	8-729-811-11	s	2SD1111
⚠R11	1-207-674-00	s	WIREWOUND 4.7 10% 6W
R13	1-247-895-00	s	CARBON 470k 5% 1/4W
R24	1-247-895-00	s	CARBON 470k 5% 1/4W
R32	1-247-891-00	s	CARBON 330k 5% 1/4W
R33	1-247-883-00	s	CARBON 150k 5% 1/4W
R38	1-247-891-00	s	CARBON 330k 5% 1/4W
R40	1-247-887-00	s	CARBON 220k 5% 1/4W
R41	1-247-701-11	s	CARBON 120 5% 1/4W
R47	1-247-881-00	s	CARBON 120k 5% 1/4W
R48	1-247-881-00	s	CARBON 120k 5% 1/4W
R76	1-247-887-00	s	CARBON 220k 5% 1/4W
R85	1-247-887-00	s	CARBON 220k 5% 1/4W
R112	1-246-449-25	s	CARBON 100 5% 1/4W
R159	1-214-853-00	s	METAL 360 1% 1/2W
R160	1-214-852-00	s	METAL 330 1% 1/2W
R189	1-247-887-00	s	CARBON 220k 5% 1/4W
R192	1-532-637-00	s	LINK, IC
R201	1-532-605-00	s	LINK, IC
R204	1-532-637-00	s	LINK, IC
R300	1-532-769-21	s	FUSE, MICRO 0.2A

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Ref No.	Parts No.	SP	Description
RV1	1-230-722-11	s	VAR, CARBON 22k
RV2	1-230-720-11	s	VAR, CARBON 4.7k
RV3	1-230-720-11	s	VAR, CARBON 4.7k
RV4	1-230-722-11	s	VAR, CARBON 22k
SW1	1-552-509-00	s	DIP
X1	1-567-143-00	s	CERAMIC 6MHz
X2	1-567-192-11	s	CERAMIC 4MHz

TG-22 BOARD

Ref No.	Parts No.	SP	Description
	1-618-597-11	o	PRINTED CIRCUIT BOARD, TG-22
D1	8-719-904-55	s	GL-5HD5

UR-14E BOARD

Ref No.	Parts No.	SP	Description
	⚠1-413-249-12	s	SWITCHING REGULATOR, UR-14E
⚠C101	1-161-742-00	s	CERAMIC 2200PF 20% 400V
C102	1-161-742-00	s	CERAMIC 2200PF 20% 400V
C103	1-161-742-00	s	CERAMIC 2200PF 20% 400V
C104	1-161-742-00	s	CERAMIC 2200PF 20% 400V
C105	1-136-185-00	s	METALIZED 0.22 20% 250V
C106	1-136-185-00	s	METALIZED 0.22 20% 250V
C107	1-161-742-00	s	CERAMIC 2200PF 20% 400V
C108	1-161-742-00	s	CERAMIC 2200PF 20% 400V
C109	1-124-961-00	s	ELECT 220 20% 200V
C110	1-124-023-00	s	ELECT 4.7 20% 350V
C111	1-124-023-00	s	ELECT 4.7 20% 350V
C112	1-124-549-00	s	ELECT 100 20% 10V
C113	1-124-961-00	s	ELECT 220 20% 200V
C114	1-124-549-00	s	ELECT 100 20% 10V
C201	1-106-351-00	s	MYLAR 0.0022 5% 200V
C202	1-106-351-00	s	MYLAR 0.0022 5% 200V
C203	1-161-825-11	s	CERAMIC 220PF 10% 500V
C204	1-161-825-11	s	CERAMIC 220PF 10% 500V
C205	1-161-825-11	s	CERAMIC 220PF 10% 500V
C206	1-161-825-11	s	CERAMIC 220PF 10% 500V
C207	1-123-357-00	s	ELECT 22 20% 50V
C209	1-106-351-00	s	MYLAR 0.0022 5% 200V
C210	1-136-153-00	s	MYLAR 0.01 5% 50V
C211	1-106-351-00	s	MYLAR 0.0022 5% 200V
C212	1-124-556-00	s	ELECT 2200 20% 16V
C213	1-124-556-00	s	ELECT 2200 20% 16V
C214	1-124-556-00	s	ELECT 2200 20% 16V
C215	1-124-556-00	s	ELECT 2200 20% 16V
C216	1-123-326-00	s	ELECT 3300 20% 16V
C217	1-123-332-00	s	ELECT 47 20% 50V

Ref No.	Parts No.	SP	Description
C651	1-124-445-00	s	ELECT 100 20% 16V
C652	1-130-591-11	s	MYLAR 3300PF 2% 100V
C653	1-136-141-00	s	MYLAR 1000PF 10% 50V
C654	1-136-165-00	s	MYLAR 0.1 5% 50V
C655	1-123-318-00	s	ELECT 33 16V
⚠CN101	1-560-436-00	o	REEPTACLE, 3P
	1-561-218-11	o	HOUSING, 3P
	1-561-432-00	o	CONTACT
CN201	1-560-438-00	o	RECEPTACLE, 5P
	1-561-424-11	o	HOUSING, 5P
	1-561-432-00	o	CONTACT
D101	8-719-300-00	s	LB-156
D201	8-719-908-00	s	ESAC33-02CS
D202	8-719-908-00	s	ESAC33-02CS
D203	8-719-900-93	s	V09C
D204	8-719-900-93	s	V09C
D205	8-719-815-55	s	1S1555
D206	8-719-100-61	s	RD11EB2
D208	8-719-101-67	s	RD7.5EL2
D209	8-719-100-30	s	RD5.1EB2
D210	8-719-100-30	s	RD5.1EB2
D651	8-719-200-02	s	10E-2
D652	8-719-100-70	s	RD15EB1
D653	8-719-815-55	s	1S1555
FB101	1-543-060-00	s	CORE
FB102	1-543-060-00	s	CORE
FB201	1-543-060-00	s	CORE
FB202	1-543-060-00	s	CORE
FB203	1-543-060-00	s	CORE
FB204	1-543-060-00	s	CORE
FB205	1-543-060-00	s	CORE
FB206	1-543-060-00	s	CORE
FB207	1-543-060-00	s	CORE
FB208	1-543-060-00	s	CORE
IC651	8-759-937-00	s	MB3759 (FUJITSU)
⚠L101	1-421-848-11	s	LINE FILTER
L201	1-421-849-11	s	CHOKE, 2.4mH
L203	1-408-316-00	s	CHOKE
L204	1-421-850-11	s	CHOKE, 12
L205	1-421-329-00	s	CHOKE
Q101	8-729-901-72	s	2SC3317
Q102	8-729-901-72	s	2SC3317
Q103	8-729-100-13	s	2SC2001
Q104	8-729-100-13	s	2SC2001
Q201	8-729-606-34	s	2SC2603-G
Q202	8-729-117-54	s	2SA1175-F

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
R101	1-214-947-00	s	METAL 2.7M 1% 1/2W
⚠R102	1-205-636-11	s	CEMENT 3.3 5% 5W
R103	1-246-529-00	s	CARBON 220k 5% 1/4W
R104	1-246-529-00	s	CARBON 220k 5% 1/4W
⚠R105	1-212-934-00	s	METAL 1 5% 1/2W
R106	1-247-700-11	s	NF CARBON 100 5% 1/4W
R107	1-246-529-00	s	CARBON 220k 5% 1/4W
R108	1-246-529-00	s	CARBON 220k 5% 1/4W
⚠R109	1-212-934-00	s	METAL 1 5% 1/2W
R110	1-247-700-11	s	NF CARBON 100 5% 1/4W
⚠R201	1-206-475-00	s	METAL 33 5% 2W
R202	1-535-369-00	s	SHUNT
⚠R203	1-213-151-00	s	METAL 4.7k 5% 5W
R204	1-247-713-11	s	NF CARBON 1k 5% 1/4W
R205	1-247-719-11	s	NF CARBON 3.3k 5% 1/4W
R206	1-249-455-11	s	NF CARBON 4.7k 5% 1/4W
R207	1-247-717-11	s	NF CARBON 2.2k 5% 1/4W
R208	1-247-123-00	s	NF CARBON 470 5% 1/4W
R209	1-247-704-11	s	NF CARBON 220 5% 1/4W
R212	1-247-857-00	s	NF CARBON 220 5% 1/2W
R651	1-249-425-11	s	NF CARBON 4.7k 5% 1/6W
RV651	1-228-644-00	s	VAR, METAL 1k 0.3W
⚠T101	1-448-423-11	s	CONVERTER
T102	1-437-120-00	s	DRIVE

VP-26 BOARD

Ref No.	Parts No.	SP	Description
	A-6711-839-A	o	MOUNTED CIRCUIT BOARD, VP-26
C2	1-124-236-00	s	ELECT 47 20% 16V
C17	1-124-236-00	s	ELECT 47 20% 16V
C18	1-161-051-00	s	CERAMIC 0.01 10% 25V
C19	1-124-236-00	s	ELECT 47 20% 16V
C20	1-161-051-00	s	CERAMIC 0.01 10% 25V
C22	1-161-051-00	s	CERAMIC 0.01 10% 25V
C23	1-124-236-00	s	ELECT 47 20% 16V
C24	1-161-051-00	s	CERAMIC 0.01 10% 25V
C31	1-161-051-00	s	CERAMIC 0.01 10% 25V
C70	1-124-236-00	s	ELECT 47 20% 16V
C71	1-124-236-00	s	ELECT 47 20% 16V
C73	1-124-236-00	s	ELECT 47 20% 16V
C74	1-161-051-00	s	CERAMIC 0.01 10% 25V
C76	1-124-584-00	s	ELECT 100 20% 10V
C77	1-124-236-00	s	ELECT 47 20% 16V

Ref No.	Parts No.	SP	Description
C78	1-124-584-00	s	ELECT 100 20% 10V
C85	1-124-584-00	s	ELECT 100 20% 10V
C87	1-161-051-00	s	CERAMIC 0.01 10% 25V
C88	1-162-294-31	s	CERAMIC 0.001 10% 50V
C91	1-161-051-00	s	CERAMIC 0.01 10% 25V
C93	1-161-772-11	s	CERAMIC 0.1 10% 25V
C94	1-124-248-00	s	ELECT 22 20% 25V
C95	1-161-051-00	s	CERAMIC 0.01 10% 25V
C96	1-124-255-00	s	ELECT 1 20% 50V
C97	1-124-236-00	s	ELECT 47 20% 16V
C98	1-124-236-00	s	ELECT 47 20% 16V
C100	1-161-051-00	s	CERAMIC 0.01 10% 25V
C101	1-161-051-00	s	CERAMIC 0.01 10% 25V
C102	1-161-051-00	s	CERAMIC 0.01 10% 25V
C103	1-161-051-00	s	CERAMIC 0.01 10% 25V
C104	1-124-236-00	s	ELECT 47 20% 16V
C105	1-124-236-00	s	ELECT 47 20% 16V
C106	1-124-462-00	s	ELECT 10 20% 16V
C107	1-124-584-00	s	ELECT 100 20% 10V
C108	1-124-462-00	s	ELECT 10 20% 10V
C109	1-124-462-00	s	ELECT 10 20% 10V
C110	1-162-282-31	s	CERAMIC 100PF 10% 50V
C111	1-161-051-00	s	CERAMIC 0.01 10% 25V
C112	1-124-236-00	s	ELECT 47 20% 10V
C113	1-161-043-00	s	CERAMIC 0.0022 10% 25V
C114	1-161-055-00	s	CERAMIC 0.022 10% 25V
C115	1-124-236-00	s	ELECT 47 20% 10V
C116	1-124-462-00	s	ELECT 10 20% 16V
C117	1-124-236-00	s	ELECT 47 20% 10V
C120	1-124-236-00	s	ELECT 47 20% 16V
C121	1-161-051-00	s	CERAMIC 0.01 10% 25V
C122	1-124-255-00	s	ELECT 1 20% 50V
C123	1-124-584-00	s	ELECT 100 20% 10V
C124	1-161-051-00	s	CERAMIC 0.01 10% 25V
C126	1-124-584-00	s	ELECT 100 20% 10V
C127	1-124-236-00	s	ELECT 47 20% 10V
C128	1-124-236-00	s	ELECT 47 20% 16V
C130	1-161-051-00	s	CERAMIC 0.01 10% 25V
C131	1-124-236-00	s	ELECT 47 20% 16V
C135	1-161-051-00	s	CERAMIC 0.01 10% 25V
C154	1-124-236-00	s	ELECT 47 20% 16V
C167	1-124-462-00	s	ELECT 10 20% 10V
C172	1-161-055-00	s	CERAMIC 0.022 10% 25V
C173	1-162-290-31	s	CERAMIC 470PF 10% 50V
C174	1-161-051-00	s	CERAMIC 0.01 10% 25V
C175	1-161-051-00	s	CERAMIC 0.01 10% 25V
C176	1-161-772-11	s	CERAMIC 0.1 10% 25V
C177	1-161-051-00	s	CERAMIC 0.01 10% 25V
C178	1-124-236-00	s	ELECT 47 20% 16V
C180	1-161-051-00	s	CERAMIC 0.01 10% 25V
C181	1-161-051-00	s	CERAMIC 0.01 10% 25V
C183	1-161-051-00	s	CERAMIC 0.01 10% 25V
C184	1-161-051-00	s	CERAMIC 0.01 10% 25V
C185	1-161-051-00	s	CERAMIC 0.01 10% 25V
C186	1-124-236-00	s	ELECT 47 20% 16V
C187	1-161-051-00	s	CERAMIC 0.01 10% 25V
C188	1-124-236-00	s	ELECT 47 20% 16V
C189	1-124-255-00	s	ELECT 1 20% 50V
C194	1-124-236-00	s	ELECT 47 20% 16V
C195	1-161-051-00	s	CERAMIC 0.01 10% 25V

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Ref No.	Parts No.	SP	Description
C196	1-124-236-00	s	ELECT 47 20% 16V
C197	1-161-051-00	s	CERAMIC 0.01 10% 25V
C198	1-161-051-00	s	CERAMIC 0.01 10% 25V
C199	1-124-236-00	s	ELECT 47 20% 16V
C200	1-161-051-00	s	CERAMIC 0.01 10% 25V
C202	1-161-051-00	s	CERAMIC 0.01 10% 25V
C203	1-161-051-00	s	CERAMIC 0.01 10% 25V
C204	1-162-282-31	s	CERAMIC 100PF 10% 50V
C205	1-161-051-00	s	CERAMIC 0.01 10% 25V
C206	1-161-051-00	s	CERAMIC 0.01 10% 25V
C207	1-161-051-00	s	CERAMIC 0.01 10% 25V
C208	1-161-051-00	s	CERAMIC 0.01 10% 25V
C209	1-161-051-00	s	CERAMIC 0.01 10% 25V
C211	1-161-051-00	s	CERAMIC 0.01 10% 25V
C215	1-161-051-00	s	CERAMIC 0.01 10% 25V
C218	1-161-051-00	s	CERAMIC 0.01 10% 25V
C224	1-161-772-11	s	CERAMIC 0.1 10% 25V
C225	1-124-245-00	s	ELECT 47 20% 16V
C226	1-162-763-11	s	CERAMIC 680PF 5% 50V
C227	1-124-236-00	s	ELECT 47 20% 16V
C228	1-124-236-00	s	ELECT 47 20% 16V
C232	1-161-051-00	s	CERAMIC 0.01 10% 25V
C500	1-124-462-00	s	ELECT 10 20% 16V
C511	1-124-236-00	s	ELECT 47 20% 16V
C515	1-124-236-00	s	ELECT 47 20% 16V
C519	1-161-051-00	s	CERAMIC 0.01 10% 25V
C520	1-161-051-00	s	CERAMIC 0.01 10% 25V
C521	1-161-772-11	s	CERAMIC 0.1 10% 25V
C525	1-124-584-00	s	ELECT 100 20% 10V
C526	1-162-294-31	s	CERAMIC 0.001 10% 50V
C527	1-124-584-00	s	ELECT 100 20% 10V
C530	1-124-236-00	s	ELECT 47 20% 10V
C532	1-124-584-00	s	ELECT 100 20% 10V
C533	1-161-051-00	s	CERAMIC 0.01 10% 25V
C536	1-124-462-00	s	ELECT 10 20% 10V
C537	1-124-584-00	s	ELECT 100 20% 10V
C538	1-161-051-00	s	CERAMIC 0.01 10% 25V
C606	1-161-051-00	s	CERAMIC 0.01 10% 25V
C613	1-162-294-31	s	CERAMIC 0.001 10% 50V
C614	1-162-286-31	s	CERAMIC 220PF 10% 50V
C615	1-124-462-00	s	ELECT 10 20% 10V
C618	1-161-051-00	s	CERAMIC 0.01 10% 25V
C619	1-124-462-00	s	ELECT 10 20% 10V
C620	1-124-462-00	s	ELECT 10 20% 10V
C621	1-124-245-00	s	ELECT 4.7 20% 16V
C622	1-161-051-00	s	CERAMIC 0.01 10% 25V
C623	1-161-051-00	s	CERAMIC 0.01 10% 25V
C624	1-161-051-00	s	CERAMIC 0.01 10% 25V
C625	1-161-051-00	s	CERAMIC 0.01 10% 25V
C629	1-124-224-00	s	ELECT 47 20% 6.3V
C630	1-131-341-00	s	TANTALUM 0.1 10% 35V
C631	1-124-584-00	s	ELECT 100 20% 10V
C632	1-124-234-00	s	ELECT 22 20% 16V
C633	1-124-234-00	s	ELECT 22 20% 16V
C635	1-124-584-00	s	ELECT 100 20% 10V

Ref No.	Parts No.	SP	Description
C638	1-161-051-00	s	CERAMIC 0.01 10% 25V
C639	1-124-236-00	s	ELECT 47 20% 16V
6) C701	1-162-294-31	s	CERAMIC 0.001 10% 50V
6) C702	1-162-294-31	s	CERAMIC 0.001 10% 50V
6) C703	1-124-222-00	s	ELECT 22 20% 6.3V
CP1	1-560-914-00	s	POST, 2P
CS1	1-561-724-00	s	SOCKET, 2P
D2	8-719-911-19	s	1SS119
D19	8-719-104-10	s	1SS99
D20	8-719-104-10	s	1SS99
D21	8-719-911-19	s	1SS119
D22	8-719-911-19	s	1SS119
D27	8-719-101-97	s	1SS97-1
D28	8-719-101-97	s	1SS97-1
D113	8-719-911-19	s	1SS119
D114	8-719-911-19	s	1SS119
D115	8-719-911-19	s	1SS119
D116	8-719-911-19	s	1SS119
D120	8-719-100-21	s	RD3.9E-B2
D122	8-719-911-19	s	1SS119
D123	8-719-911-19	s	1SS119
D124	8-719-911-19	s	1SS119
D128	8-719-911-19	s	1SS119
D131	8-719-104-10	s	1SS99
D132	8-719-104-10	s	1SS99
D133	8-719-104-10	s	1SS99
D134	8-719-104-10	s	1SS99
D136	8-719-911-19	s	1SS119
D137	8-719-104-10	s	1SS99
DL2	1-415-154-00	s	35ns
DL3	1-415-162-21	s	50ns
DL6	1-415-544-11	s	DELAY LINE
FL4	1-236-039-11	s	LOW PASS
FL6	1-235-469-11	s	LOW PASS
FL7	1-235-473-11	s	LOW PASS
FL8	1-235-478-11	s	HIGH PASS
FL9	1-231-581-21	s	HIGH PASS
FL14	1-409-410-11	s	TRAP
IC3	8-759-208-10	s	TC4053BP (TOSHIBA)
IC4	8-759-400-06	s	AN608P (MATSUSHITA)
IC6	8-759-601-87	s	CX-187 (SONY)
IC10	8-743-880-00	s	BX-388 (SONY)
IC12	8-759-207-38	s	TA7374P (TOSHIBA)
IC13	8-752-321-89	s	CXL5003P
IC14	8-759-708-09	s	NJM78L09A (JRC)
IC15	8-759-200-60	s	TA7060AP (TOSHIBA)
IC16	8-759-708-05	s	NJM78L05 (JRC)
IC17	8-741-114-00	s	BX-1140 (SONY)

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
IC18	8-759-927-56	s	BA7021 (ROHM)
IC19	8-743-880-00	s	BX-388 (SONY)
IC25	8-759-208-17	s	TC4528BP (TOSHIBA)
IC26	8-749-900-59	s	BX-1448L (SONY)
IC27	8-749-900-68	s	BX-1447L (SONY)
IC28	8-759-208-10	s	TC4053BP (TOSHIBA)
IC29	8-759-200-60	s	TA7060AP (TOSHIBA)
IC30	8-749-938-90	s	BX-389 (SONY)
IC31	8-751-340-10	s	CX-134A (SONY)
IC32	8-759-400-06	s	AN608P (MATSUSHITA)
IC34	8-752-006-10	s	CX20061 (SONY)
IC37	8-752-006-10	s	CX20061 (SONY)
IC38	8-759-200-60	s	TA7060AP (TOSHIBA)
L4	1-410-468-11	s	6.8
L5	1-410-482-31	s	100
L19	1-410-482-31	s	100
L23	1-410-482-31	s	100
L24	1-410-482-31	s	100
L29	1-410-482-31	s	100
L33	1-410-482-31	s	100
L38	1-410-482-31	s	100
L40	1-410-482-31	s	100
L41	1-410-482-31	s	100
L43	1-410-494-11	s	1MM
L48	1-410-473-11	s	18
L49	1-410-087-31	s	10MM
L50	1-410-471-11	s	12
L51	1-410-471-11	s	12
L52	1-410-087-31	s	10MM
L105	1-410-482-31	s	100
L107	1-410-482-31	s	100
L111	1-410-482-31	s	100
L112	1-410-482-31	s	100
L113	1-410-482-31	s	100
L114	1-410-471-11	s	12
L115	1-410-478-11	s	47
L116	1-410-087-31	s	10MM
L117	1-410-087-31	s	10MM
L200	1-410-482-31	s	100
LV1	1-407-565-00	s	COIL, VARIABLE 2.2
LV2	1-407-268-00	s	MICRO 1.5MM
Q6	8-729-600-24	s	2SC403SP
Q7	8-729-600-24	s	2SC403SP
Q8	8-729-201-05	s	2SC2878-B
Q9	8-729-600-24	s	2SC403SP
Q10	8-729-600-24	s	2SC403SP
Q11	8-729-384-48	s	2SA844
Q12	8-729-600-24	s	2SC403SP
Q35	8-729-600-24	s	2SC403SP
Q36	8-729-600-24	s	2SC403SP
Q40	8-729-600-24	s	2SC403SP

Ref No.	Parts No.	SP	Description
Q41	8-729-384-48	s	2SA844
Q42	8-729-600-24	s	2SC403SP
Q43	8-729-384-48	s	2SA844
Q44	8-729-600-24	s	2SC403SP
Q46	8-729-600-24	s	2SC403SP
Q47	8-729-600-24	s	2SC403SP
Q48	8-729-600-24	s	2SC403SP
Q49	8-729-600-24	s	2SC403SP
Q50	8-729-600-24	s	2SC403SP
Q52	8-729-900-89	s	DTC144ES
Q55	8-729-600-24	s	2SC403SP
Q74	8-729-600-24	s	2SC403SP
Q78	8-729-600-24	s	2SC403SP
Q79	8-729-600-24	s	2SC403SP
Q80	8-729-600-24	s	2SC403SP
Q81	8-729-600-24	s	2SC403SP
Q82	8-729-201-05	s	2SC2878-B
Q89	8-729-600-24	s	2SC403SP
Q90	8-729-600-24	s	2SC403SP
Q91	8-729-600-24	s	2SC403SP
Q92	8-729-600-24	s	2SC403SP
Q93	8-729-600-24	s	2SC403SP
Q94	8-729-384-48	s	2SA844
Q95	8-729-600-24	s	2SC403SP
Q96	8-729-600-24	s	2SC403SP
Q97	8-729-600-24	s	2SC2603
Q111	8-729-113-33	s	2SB733-T-4
Q112	8-729-384-48	s	2SA844
Q114	8-729-600-24	s	2SC403SP
Q115	8-729-600-24	s	2SC403SP
Q116	8-729-900-89	s	DTC144ES
Q117	8-729-900-89	s	DTC144ES
Q118	8-729-384-48	s	2SA844
Q119	8-729-384-48	s	2SA844
Q120	8-729-384-48	s	2SA844
Q122	8-729-900-89	s	DTC144ES
Q123	8-729-900-89	s	DTC144ES
Q124	8-729-201-05	s	2SC2878-B
Q125	8-729-900-89	s	DTC144ES
Q127	8-729-900-89	s	DTC144ES
Q131	8-729-900-89	s	DTC144ES
Q202	8-729-600-24	s	2SC403SP
Q203	8-729-900-89	s	DTC144ES
Q205	8-729-600-24	s	2SC403SP
Q206	8-729-900-89	s	DTC144ES
Q207	8-729-600-24	s	2SC403SP
Q208	8-729-900-89	s	DTC144ES
Q209	8-729-900-89	s	DTC144ES
Q210	8-729-900-89	s	DTC144ES
Q211	8-729-384-48	s	2SA844
Q212	8-729-900-89	s	DTC144ES
Q213	8-729-900-89	s	DTC144ES
Q279	8-729-600-24	s	2SC403SP
Q280	8-729-600-24	s	2SC403SP
Q281	8-729-384-48	s	2SA844
Q283	8-729-600-24	s	2SC403SP
Q284	8-729-600-24	s	2SC403SP
Q285	8-729-600-24	s	2SC403SP
Q292	8-729-900-89	s	DTC144ES
6) Q300	8-729-900-89	s	DTC144ES

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

VP-26 , FRAME

Ref No.	Parts No.	SP	Description
RV2	1-228-990-00	s	VAR, CRABON 1K
RV3	1-228-990-00	s	VAR, CRABON 1K
RV4	1-228-990-00	s	VAR, CRABON 1K
RV6	1-228-994-00	s	VAR, CRABON 10K
RV20	1-228-990-00	s	VAR, CRABON 1K
RV21	1-228-990-00	s	VAR, CRABON 1K
RV22	1-228-990-00	s	VAR, CRABON 1K
RV23	1-228-994-00	s	VAR, CRABON 10K
RV24	1-228-995-00	s	VAR, CRABON 22K
RV34	1-228-997-00	s	VAR, CRABON 100K
RV35	1-228-993-00	s	VAR, CRABON 4.7K
RV36	1-228-991-00	s	VAR, CRABON 2.2K
RV37	1-228-990-00	s	VAR, CRABON 1K
RV38	1-228-991-00	s	VAR, CRABON 2.2K
RV39	1-228-991-00	s	VAR, CRABON 2.2K
RV40	1-228-991-00	s	VAR, CRABON 2.2K
RV41	1-228-991-00	s	VAR, CRABON 2.2K
RV105	1-228-995-00	s	VAR, CRABON 22K
RV106	1-228-994-00	s	VAR, CRABON 10K
RV107	1-228-990-00	s	VAR, CRABON 1K
RV108	1-228-990-00	s	VAR, CRABON 1K
RV109	1-228-991-00	s	VAR, CRABON 2.2K
S1	1-552-509-00	s	DIP

Ref No.	Parts No.	SP	Description
FRAME			
	A-6709-606-A	s	HEAD DRUM ASSY DUH-42A-R
	A-6709-601-A	s	UPPER DRUM ASSY DUR-42-R
⚠	1-413-249-12	s	SWITCHING REGULATOR UR-14E
	1-464-801-12	s	ENCODER, ROTARY
⚠CN1001	1-509-546-00	s	3P INLET
CN1002	1-563-356-11	s	CONNECTOR, MULTI 8P "TV"
CN1003	1-563-354-11	o	BNC "VIDEO OUT-1"
CN1004	1-563-354-11	o	BNC "VIDEO OUT-2"
CN1005	1-563-354-11	o	BNC "RF OFF TAPE OUT"
CN1007	1-563-354-11	o	BNC "EXT SYNC IN"
CN1009	1-563-989-11	s	JACK, PIN (RCA) 1P "AUDIO MONITOR"
CN1011	1-560-403-00	s	RECEPTACLE 10P "RF MOD"
CN1012	1-555-977-00	s	RECEPTACLE "RF OUT"
CN1014	1-563-355-11	s	JACK "REMOTE"
CN1017	1-563-030-21	s	CONNECTOR XLR 3P MALE "AUDIO LINE OUT CH-1"
CN1018	1-563-030-21	s	CONNECTOR XLR 3P MALE "AUDIO LINE OUT CH-2"
CS1001	1-586-633-00	s	CONDENSATION SENSOR
PM1001	1-454-415-11	s	SOLENOID, PLUNGER 12V 9.5/52 OHM "TAKE-UP IDLER"
PM1002	1-454-417-31	s	SOLENOID, PLUNGER 12V 12/90 OHM "TAKE-UP BRAKE"
PM1004	1-454-415-11	s	SOLENOID, PLUNGER 12V 9.5/52 OHM "SUPPLY IDLER"
PM1005	1-454-417-31	s	SOLENOID, PLUNGER 12V 12/90 OHM "SUPPLY BRAKE"
PM1007	1-454-417-31	s	SOLENOID, PLUNGER 12V 12/90 OHM "SEARCH"
PM1008	1-454-416-31	s	SOLENOID, PLUNGER 12V, 7/35 OHM "PINCH"
M1001	8-835-258-01	s	DC, BHF-1915B "CAPSTAN"
M1005	8-835-179-01	s	DC, MCB2B15 "CASSETTE COMPARTMENT"
M1006	8-835-178-01	s	DC FN30-T26N1E "REEL"
RV1001	1-237-703-11	s	VAR, CARBON 2k/2k "HEADPHONES LEVEL"
RV1004	1-237-215-11	s	VAR, CARBON 100k "TRACKING"
⚠S1001	1-570-117-11	s	SWITCH, ROCKER "AC POWER"
	1-509-898-00	s	RECEPTACLE
	1-509-910-00	s	HOUSING, CONNECTOR (2P)
	1-561-218-00	o	CONNECTOR SOCKET, 3P
	1-561-254-00	s	CONNECTOR CONTACT
S1002	1-552-271-00	s	SWITCH, SLIDE "TIMER"
S1004	1-516-781-XX	s	SLIDE "COLOR LOCK"
S1005	1-516-779-XX	s	SLIDE "TBC"

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

15-4. PACKING MATERIAL AND ACCESSORIES (SUPPLIED)

Parts No.	SP	Description
⚠1-556-760-11	s	CORD, POWER
3-662-364-00	s	BAG, PROTECTION
3-718-355-01	o	COVER, RF
3-718-359-01	o	CUSHION (UPPER)
3-718-360-01	o	CUSHION (LOWER)
3-718-408-01	o	INDIVIDUAL CARTON
⚠3-769-145-11	s	MANUAL, INSTRUCTION

15-5. FIXTURE

Parts No.	SP	Description
J-6001-820-A	s	DRUM ECCENTRICITY GAUGE (3)
J-6001-830-A	s	DRUM ECCENTRICITY GAUGE (2)
J-6001-840-A	s	DRUM ECCENTRICITY GAUGE (1)
J-6001-930-A	s	DRUM ECCENTRICITY GAUGE (4)
J-6009-830-A	s	FLATNESS PLATE
J-6026-240-A	s	ADJUSTMENT DRIVER
J-6130-010-A	s	REEL TABLE HEIGHT CHECK BASE JIG
J-6130-020-A	s	REEL TABLE HEIGHT CHECK JIG
J-6153-020-A	s	DIHEDRAL ADJUSTMENT DRIVER
J-6150-140-A	s	ECCENTRICITY SCTEWDRIVER 6 MM DIA.
J-6153-580-A	s	PINCH LEVER ADJUSTMENT JIG
Y-2031-001-0	s	CLEANING FLUID
2-034-697-00	s	CLEANING PIECE
3-702-216-01	s	BACK TENSION ADJUSTMENT JIG
7-661-018-01	s	SONY OIL
7-732-050-20	s	TENISON SCALE (50g full scale)
7-732-050-30	s	TENSION SCALE (100g full scale)
7-732-050-40	s	TENSION SCALE (200g full scale)
7-732-050-50	s	TENSION SCALE (500g full scale)
8-899-999-53	s	TORQUE MEASUREMENT TAPE
8-960-020-62	s	ALIGNMENT TAPE RR5-2SB PAL
8-960-035-61	s	ALIGNMENT TAPE RR5-2SC PAL
8-960-036-02	s	ALIGNMENT TAPE RR2-1SD PAL
8-960-036-80	s	ALIGNMENT TAPE RR5-1SD PAL
9-911-053-00	s	THICKNESS GAUGE